PIONEER
The Art of Entertainment

Service Manual

ORDER NO.
RRV1698

STEREO FILE-TYPE CD CASSETTE DECK RECEIVER

XR-P970F

XR-P770F

●Refer to the service manual RRV1685 for XR-P970F/YPW.

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model		Power Requirement	Remark
	XR-P970F	XR-P770F		
KUXJ	○	○	AC120V	
KCXJ	○	○	AC120V	

CONTENTS

1. CONTRAST OF MISCELLANEOUS PARTS 2
2. SCHEMATIC DIAGRAM 10
3. PCB CONNECTION DIAGRAM 19
4. ADJUSTMENT 21

PIONEER ELECTRONIC CORPORATION 4-1, Meguro 1-Chome, Meguro-ku, Tokyo 153, Japan
PIONEER ELECTRONICS SERVICE, INC. P.O. Box 1760, Long Beach, CA 90801-1760, U. S. A.
PIONEER ELECTRONIC (EUROPE) N.V. Haven 1087 Keetberglaan 1, 9120 Melsele, Belgium
PIONEER ELECTRONICS ASIACENTRE PTE. LTD. 501 Orchard Road, #10-00 Lane Crawford Place, Singapore 0923

© PIONEER ELECTRONIC CORPORATION 1996

T–SZY NOV. 1996 Printed in Japan

1. CONTRAST OF MISCELLANEOUS PARTS

NOTES:

- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by " ⊙ " are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47K ohm (tolerance is shown by J=5%, and K=10%).

560 → 56×10^1 → 561 .... RD1/4PU $\boxed{5}\boxed{6}\boxed{1}$ J
47 k → 47×10^3 → 473 .... RD1/4PU $\boxed{4}\boxed{7}\boxed{3}$ J
0.5 → R50 .... RN2H $\boxed{R}\boxed{5}\boxed{0}$ K
1 → 1R0 .... RS1P $\boxed{1}\boxed{R}\boxed{0}$ K

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62 k → 562×10^1 → 5621 .... RN1/4PC $\boxed{5}\boxed{6}\boxed{2}\boxed{1}$ F

■ CONTRAST OF XR-P970F/KUXJ, KCXJ, XR-P770/KUXJ and KCXJ

XR-P970F/KUXJ, KCXJ, XR-P770F/KUXJ, KCXJ and XR-P970F/YPW have the same construction except for the following :

Mark	Symbol & Description	Part No.					Remarks
		XR-P970F			XR-P770F		
		YPW	KUXJ	KCXJ	KUXJ	KCXJ	
NSP	MAIN ASSY	AWK7326	AWK7327	AWK7327	AWK7323	AWK7323	
	AF ASSY	AWZ8696	AWZ8423	AWZ8423	AWZ8420	AWZ8420	
	SECONDARY ASSY	AWZ8758	AWZ8760	AWZ8760	AWZ8794	AWZ8794	*1
	G.C ASSY	AWZ8565	AWZ8565	AWZ8565	AWZ8590	AWZ8590	
	FRONT AMP ASSY	AWZ8698	AWZ8698	AWZ8698	AWZ8797	AWZ8797	
	REAR-AMP REG ASSY	AWZ8699	AWZ8699	AWZ8699	Not used	Not used	
	REGULATOR ASSY	Not used	Not used	Not used	AWZ8589	AWZ8589	
NSP	COMPLEX ASSY	AWM7233	AWM7234	AWM7234	AWM7230	AWM7230	
	CD DOOR ASSY	AWZ8700	AWZ8796	AWZ8796	AWZ8711	AWZ8711	
	PRIMARY ASSY	AWZ8705	AWZ8704	AWZ8704	AWZ8756	AWZ8756	
	CD ASSY	AWZ8751	AWZ8712	AWZ8712	AWZ8712	AWZ8712	
	HEADPHONE ASSY	AWZ8703	AWZ8571	AWZ8571	AWZ8571	AWZ8571	
	MIC ASSY	AWZ8714	Not used	Not used	Not used	Not used	
	SW2 ASSY	AWZ8581	AWZ8701	AWZ8701	AWZ8701	AWZ8701	
	OPE. LEFT ASSY	AWZ8570	AWZ8708	AWZ8708	AWZ8708	AWZ8708	
NSP	LED ASSY	AWZ8582	Not used	Not used	Not used	Not used	
	JOG ASSY	AWZ8702	AWZ8702	AWZ8702	AWZ8569	AWZ8569	
	FM/AM TUNER MODULE	AXQ7051	AXQ7061	AXQ7061	AXQ7061	AXQ7061	
NSP	Chassis	ANA7053	ANA7034	ANA7034	ANA7034	ANA7034	
NSP	Sub Chassis	ANA7054	ANA7057	ANA7057	ANA7057	ANA7057	
	Shaft Holder	ANB7024	ANB7094	ANB7094	ANB7094	ANB7094	
	Rear Panel	ANC7507	ANC7554	ANC7554	ANC7547	ANC7547	
	Front Stay	AND7006	AND7009	AND7009	AND7009	AND7009	
	Rear Stay	AND7007	AND7010	AND7010	AND7010	AND7010	
	AC Power Card	ADG1123	PDG1057	PDG1057	PDG1057	PDG1057	
	Power Transformer (AC240V)	ATS7148	Not used	Not used	Not used	Not used	
	Power Transformer (AC120V)	Not used	ATS7146	ATS7146	ATS7149	ATS7149	
	Strain Relief	CM-22B	CM-22C	CM-22C	CM-22C	CM-22C	
	Fuse (FU1 : T1.6A)	AEK1056	Not used	Not used	Not used	Not used	
	Fuse (FU1 : 5A)	Not used	REK1083	REK1083	Not used	Not used	
	Fuse (FU1 : 6.3A)	Not used	Not used	Not used	REK1085	REK1085	
	Mold A	AMR2594	AMR7005	AMR7005	AMR7005	AMR7005	
	Mold B	AMR2595	AMR7006	AMR7006	AMR7006	AMR7006	
	Heat Sink	ANH7007	ANH7008	ANH7008	ANH7008	ANH7008	
	Sheet	AEE1014	AEE7010	AEE7010	AEE7010	AEE7010	
	Bracket	ANG1868	ANG7009	ANG7009	ANG7009	ANG7009	

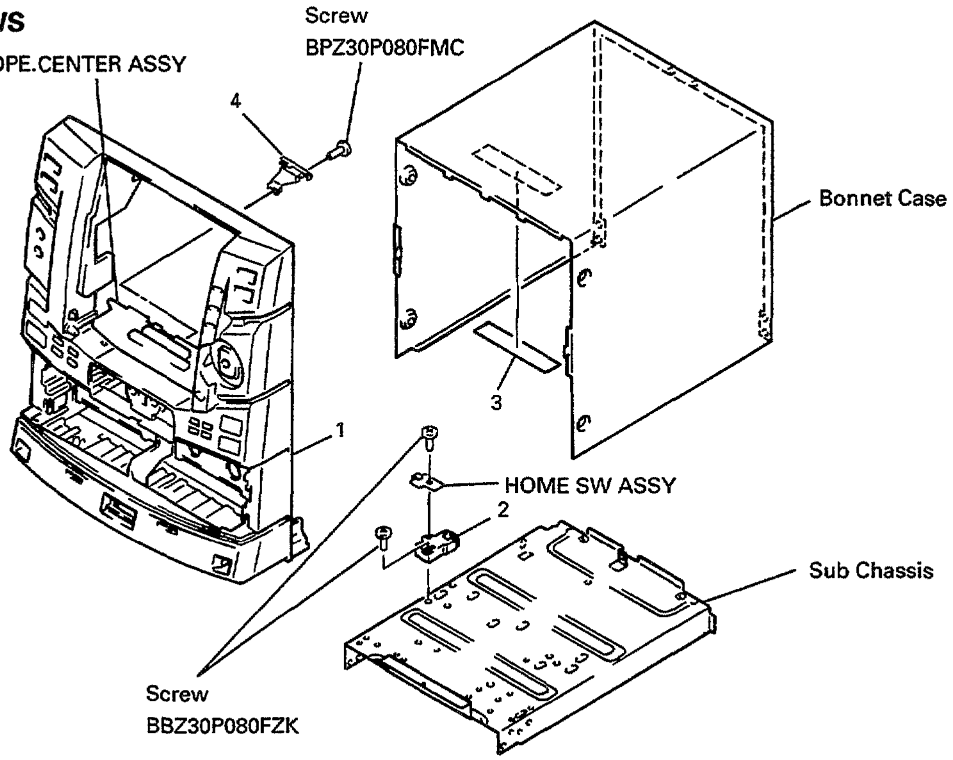
Mark	Symbol & Description	Part No.					Remarks
		XR-P970F			XR-P770F		
		YPW	KUXJ	KCXJ	KUXJ	KCXJ	
NSP	GS Slot-In Mechamism ASSY	AXA7044	Not used	Not used	Not used	Not used	
	Vol Knob	AAB7111	AAB7117	AAB7117	AAB7117	AAB7117	
	Jog Knob	AAB7112	AAB7122	AAB7122	AAB7122	AAB7122	
	Slot Eject Button	AAD7337	AAD7358	AAD7358	AAD7358	AAD7358	
	SFC Button	AAD7338	AAD7359	AAD7359	AAD7359	AAD7359	
	Power Button	AAD7339	AAD7360	AAD7360	AAD7360	AAD7360	
	Play Button	AAD7340	AAD7361	AAD7361	AAD7361	AAD7361	
	Timer Butoon	AAD7341	AAD7362	AAD7362	AAD7362	AAD7362	
	Name Button	AAD7342	AAD7371	AAD7371	AAD7371	AAD7371	
	Function Button	AAD7366	AAD7363	AAD7363	AAD7363	AAD7363	
	Eject Button L	AAD7345	AAD7367	AAD7367	AAD7367	AAD7367	
	Eject Button R	AAD7346	AAD7368	AAD7368	AAD7368	AAD7368	
	CD Door	AAN7155	AAN7156	AAN7156	AAN7156	AAN7156	
	Deck Door Spring	ABH7134	ABH7149	ABH7149	ABH7149	ABH7149	
	Eject ARM (L)	AMR7020	AMR7074	AMR7074	AMR7074	AMR7074	
	Eject ARM (R)	AMR7021	AMR7075	AMR7075	AMR7075	AMR7075	
	Eject Spring (L)	RBH1411	ABH7102	ABH7102	ABH7102	ABH7102	
	Eject Spring (R)	RBH1412	ABH7103	ABH7103	ABH7103	ABH7103	
	Front Panel A	AZA7207	Not used	Not used	Not used	Not used	
	Front Panel B	AZA7209	Not used	Not used	Not used	Not used	
	Front Panel	Not used	AZA7228	AZA7228	AZA7228	AZA7228	*2, NO. 1
	Cassette door Panel L	AZA7212	AZA7230	AZA7230	AZA7230	AZA7230	
	Cassette door Panel R	AZA7213	AZA7227	AZA7227	AZA7227	AZA7227	
	AMP Window	AAK7341	AAK7341	AAK7341	AAK7306	AAK7306	
	Connector Assy 5P	RKP1582	RKP1682	RKP1682	RKP1682	RKP1682	
	Connector Assy 3P	RKP1583	RKP1683	RKP1683	RKP1683	RKP1683	
	Azimath Cover L	AZA7214	AZA7223	AZA7223	AZA7223	AZA7223	
	Azimath Cover R	AZA7215	AZA7224	AZA7224	AZA7224	AZA7224	
	JOG Panel A	AZA7210	AZA7234	AZA7234	AZA7229	AZA7229	
	Edge Light Cover	AMR7136	AMR7170	AMR7170	AMR7170	AMR7170	
	Slot Sheet	AWL7022	Not used	Not used	Not used	Not used	
	Damper Assy	AXA7021	AXA7051	AXA7051	AXA7051	AXA7051	
	Link Sheet	AAK7386	Not used	Not used	Not used	Not used	
	Slot Sheet Mold	AMR7139	Not used	Not used	Not used	Not used	
	Home SW Mold	Not used	AMR7168	AMR7168	AMR7168	AMR7168	*2, NO. 2
	MIC Volume Knob	AAB7118	Not used	Not used	Not used	Not used	
	Name Plate	AAK7335	AAK7335	AAK7335	AAK7309	AAK7309	
	65 Lavel	Not used	ORW1069	Not used	ORW1069	Not used	*2, NO. 3
	PCB Hold Plate	Not used	ANG7120	ANG7120	ANG7120	ANG7120	*2, NO. 4
	Caution Lavel	PRW1018	Not used	Not used	Not used	Not used	
NSP	Caution Lavel (F)	VRW-328	Not used	Not used	Not used	Not used	
	Caution Lavel (G)	VRW-329	Not used	Not used	Not used	Not used	
	FM Antenna	ADH7007	ADH7004	ADH7004	ADH7004	ADH7004	
	CD Case Rack	AMR7066	AMR7072	AMR7072	AMR7072	AMR7072	
	Loop Antenna Assy	ATB7004	ATB7009	ATB7009	ATB7009	ATB7009	
	Operating Instructions (English)	ARB7104	ARB7105	ARB7105	ARB7105	ARB7105	
	Operating Instruction (French)	Not used	Not used	ARC7155	Not used	ARC7155	
	Packing Case	AHD7393	AHD7409	AHD7409	AHD7408	AHD7408	
	Remote Control unit (CU-XR028)	AXD7103	AXD7103	AXD7103	Not used	Not used	
	Remote Control unit (CU-XR027)	Not used	Not used	Not used	AXD7102	AXD7102	

*1 : Although AWZ8760 and AWZ8758 are different in part number, they consist of the same components.

*2 : The numbers in the remarks column correspond to the numbers on the exploded diagram, refer to “EXPLODED VIEWS”.

MAIN ASSY (for XR-P770F)
- AF ASSY
- SECONDARY ASSY
- FRONT AMP ASSY
- G. C ASSY
- REGULATOR ASSY

●EXPLODED VIEWS



AF ASSY

AWZ8423, AWZ8420 and AWZ8696 have the same construction except for the following :

Mark	Symbol & Description	Part No.			Remarks
		AWZ8696	AWZ8423	AWZ8420	
	IC1151, IC1902, IC4101, IC4301, IC4501	XLA4558F-P	NJM4558M-D	NJM4558M-D	
	IC1801	M62429FP	M62429FP	Not used	
	IC7101	NJW1102FG1	NJW1102FG1	Not used	
	IC7102	NJU9702D	NJU9702D	Not used	
	Q1801, Q1802	2SD2114K	2SD2114K	Not used	
	D1037	MTZJ39D	Not used	Not used	
	D7101, D7102	1SS355	1SS355	Not used	
⚠	L7101	LAU220J	LAU220J	Not used	
	RY1001	ASR7007	ASR7008	ASR7008	
⚠	C1001	CEAS332M16	CEAS332M25	CEAS332M25	
⚠	C1002	CEAS222M35	CEAS222M35	CEAS471M35	
⚠	C1004	CEAS222M16	ACH7059 (2200µF/25V)	ACH7056 (3300µF/50V)	
	C1014, C1016, C1022–C1027	CKSQYB104K25	CKSQYB104K25	Not used	
	C1029–C1032	CEAS471M10	CEAS471M10	Not used	
	C1155, C1156	CKSQYB273K50	CKSQYB223K50	CKSQYB223K50	
	C1157, C1158	CKSQYB473K25	CKSQYB104K25	CKSQYB104K25	
	C1905	CEAS2R2M50	Not used	Not used	
	C7012, C7165	CKSQYB104K25	CKSQYB104K25	Not used	
	C1801, C1802, C7137, C7138	CEAS2R2M50	CEAS2R2M50	Not used	
	C1803, C1804	CKSQYB471K50	CKSQYB471K50	Not used	
	C7010, C7011, C7132	CEAS101M25	CEAS101M25	Not used	
	C7103	CEANL220M25	CEANL220M25	Not used	
	C7104, C7160	CEAS470M16	CEAS470M16	Not used	

Mark	Symbol & Description	Part No.			Remarks
		AWZ8696	AWZ8423	AWZ8420	
	C7105	CQMA472J50	CQMA472J50	Not used	
	C7106	CEJA220M25	CEAS220M25	Not used	
	C7107, C7110	CCSQCH681J50	CCSQCH681J50	Not used	
	C7108, C7109, C7111, C7112	CFTXA104J50	CFTXA104J50	Not used	
	C7116–C7119, C7136, C7158, C7159	CFTXA104J50	CFTXA104J50	Not used	
	C7113, C7114, C7134	CFTXA473J50	CFTXA473J50	Not used	
	C7115, C7120	CFTXA223J50	CFTXA223J50	Not used	
	C7121, C7123, C7124, C7126	CFTXA224J50	CFTXA224J50	Not used	
	C7122, C7125, C7153	CEAS4R7M50	CEAS4R7M50	Not used	
	C7129	CEAS100M50	CEAS100M50	Not used	
	C7130, C7155, C7162	CCSQCH561J50	CCSQCH561J50	Not used	
	C7131	CCSQCH102J50	CCSQCH102J50	Not used	
	C7133	CQMA562J50	CQMA562J50	Not used	
	C7135	CFTXA684J50	CFTXA684J50	Not used	
	C7139	CEAS221M10	CEAS221M10	Not used	
	C7152	CKSQYF104Z50	CKSQYF104Z50	Not used	
	C7156	CKSQYB562K50	CKSQYB562K50	Not used	
	C7157, C7161	CFTXA683J50	CFTXA683J50	Not used	
	C7163	CKSQYB222K50	CKSQYB222K50	Not used	
	C7179	CKSQYB102K50	CKSQYB102K50	Not used	
	R1013	RS3LMF391J	RS3LMF391J	RS3LMF471J	
	R1036, R1049	Not used	Not used	RS1/10S000J	
	R1040, R1046	RS1/10S000J	RS1/10S000J	Not used	
	R1153-R1156	RS1/10S623J	RS1/10S433J	RS1/10S433J	
	R1807, R1808	RS1/10S471J	RS1/10S471J	Not used	
	R1037, R1038, R1044, R1045	RS1/10S100J	RS1/10S100J	Not used	
	R1809–R1812, R7010, R7012	RS1/10S103J	RS1/10S103J	Not used	
	R7013, R7123, R7128	RS1/10S103J	RS1/10S103J	Not used	
	R1920	RS1/10S000J	Not used	Not used	
	R1905, R1906	Not used	Not used	RD1/4PU223J	
	R7011	RS1/10S472J	RS1/10S472J	Not used	
	R7014, R7015	RS1/10S101J	RS1/10S101J	Not used	
	R7101, R7102, R7113, R7188	RS1/10S223J	RS1/10S223J	Not used	
	R7190, R7905, R7906	RS1/10S223J	RS1/10S223J	Not used	
	R7103	RS1/10S475J	RS1/10S475J	Not used	
	R7104	RS1/10S104J	RS1/10S104J	Not used	
	R7105, R7108	RS1/10S473J	RS1/10S473J	Not used	
	R7111	RS1/10S104F	RS1/10S104F	Not used	
	R7106, R7109, R7112, R7115	RS1/10S153J	RS1/10S153J	Not used	
	R7122, R7124, R7127	RS1/10S153J	RS1/10S153J	Not used	
	R7107, R7110	RS1/10S752J	RS1/10S752J	Not used	
	R7116	RS1/10S334J	RS1/10S334J	Not used	
	R7121	RS1/10S105J	RS1/10S105J	Not used	
	R7126	RS1/10S300J	RS1/10S300J	Not used	
	R7129	RS1/10S433J	RS1/10S433J	Not used	
	R7181–R7183, R7185–R7187	RS1/10S102J	RS1/10S102J	Not used	
	CN1005 PIN JACK 1-P	AKB7042	AKB7042	Not used	
	X7101 CERAMIC RESONATOR (2.00 MHz)	ASS7011	ASS7011	Not used	

■ SECONDARY ASSY

AWZ8794 and AWZ8758 have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ8758	AWZ8794	
⚠	IC1004, IC1007	AEK7018 (IC PROTECTOR 4A)	AEK7010 (IC PROTECTOR 1.25A)	

■ G.C ASSY

AWZ8590 and AWZ8565 have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ8565	AWZ8590	
⚠	IC1501, C1502	ACH7056 (3300µF/50V)	ACH7007 (4700µF/63V)	

■ FRONT AMP ASSY

AWZ8797 and AWZ8698 have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ8698	AWZ8797	
⚠	IC1551	STK4162-2GP	STK4192-2GP	
⚠	Q1502	IRF530	IRF540	
	D1505, D1506	MTZJ22C	MTZJ27C	
	R1501, R1502	RD1/4PU103J	RD1/4PU822J	
	R1509, R1510	RN1/6PQ7501F	RN1/6PQ8201F	
	R1511, R1512	RD1/4PU302J	RN1/6PQ2401F	

■ REGULATOR ASSY

REGULATOR assy (AWZ8589) and REAR-AMP REG assy (AWZ8699) have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ8699	AWZ8589	
	IC1601	TDA8560Q	Not used	
⚠	Q1601	IRFI9Z24G	Not used	
	Q1602	2SC2412K	Not used	
	Q1606–Q1608	2SA1037K	Not used	
	D1211, D1604	1SS254	Not used	
	D1601	MTZJ18B	Not used	
	D1602	MTZJ4.7B	Not used	
	D1603	MTZJ12B	Not used	
	C1601, C1602	CEASR47M50	Not used	
	C1603, C1604, C1611–C1614	CKSQYB102K50	Not used	
	C1605	CEAS101M35	Not used	
	C1606	CKSQYB473K50	Not used	
	C1607	CEJA470M16	Not used	
	C1609	CEJA101M10	Not used	
	R1601	RD1/4PU563J	Not used	
	R1602	RS1/10S101J	Not used	
	R1603	RD1/4PU302J	Not used	
	R1604	RD1/4PU102J	Not used	
	R1605, R1612–R1615, R1617, R1618	RD1/4PU103J	Not used	
	R1607, R1620	RS1/10S103J	Not used	

Mark	Symbol & Description	Part No.		Remarks
		AWZ8699	AWZ8589	
	R1608, R1616	RD1/4PU472J	Not used	
	R1611	RS1/10S2R2J	Not used	
	R1619	RD1/4PU100J	Not used	

Note : The PCB diagram for REGULATOR ASSY is the same as that for REAR-AMP REG ASSY in XR-P970F/YPW service manual.

■ CD DOOR ASSY

AWZ8796, AWZ8711 and AWZ8700 have the same construction except for the following :

Mark	Symbol & Description	Part No.			Remarks
		AWZ8700	AWZ8796	AWZ8711	
	D2019	1SS254	Not used	Not used	
	D2022	Not used	Not used	1SS254	
	C2006	CEJAR47M50	CEASR47M50	CEASR47M50	

■ PRIMARY ASSY

AWZ8704, AWZ8756 and AWZ8705 have the same construction except for the following :

Mark	Symbol & Description	Part No.			Remarks
		AWZ8705	AWZ8704	AWZ8756	
⚠	L101	ATF-151	ATF1136	ATF1136	
⚠	R101 (2.2MΩ, 1/2W)	Not used	ACN-208	ACN-208	

■ CD ASSY

AWZ8712 and AWZ8571 have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ8751	AWZ8712	
	C8235	CKSQYF103Z50	Not used	
	R8015	RD1/4PU272J	Not used	
	R8231, R8232	RS1/10S473J	Not used	
	R8233, R8234	RS1/10S473J	RS1/10S000J	
	R8235	RS1/10S470J	Not used	
	R8248	RD1/4PU100J	Not used	
	R8025—R8028	Not used	RS1/10S473J	
	R8995	Not used	RS1/10S000J	
	R8996	Not used	RS1/10S332J	
	R8997	Not used	RS1/10S103J	

■ HEADPHONE ASSY

AWZ8571 and AWZ8703 have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ8703	AWZ8571	
	C2501, C2502	CKSQYB102K50	Not used	

■ SW2 ASSY

AWZ8701 and AWZ8581 have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ8581	AWZ8701	
	R2305	RN1/4PC1802F	RS1/10PC1802F	

■ OPE. LEFT ASSY

AWZ8708 and AWZ8570 have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ8570	AWZ8708	
	Q2351	DTC143EK	Not used	
	R2360	RD1/4PU201J	Not used	

■ JOG ASSY

AWZ8569 and AWZ8702 have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ8702	AWZ8569	
	S2403, S2405	ASG1034	Not used	
	R2403	RN1/4PC1801F	Not used	
	R2404	RN1/4PC2701F	Not used	

■ PCB PARTS LIST

A F FM/AM TUNER MODULE (AXQ7061)

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC6201		LA1832ML
	IC6202		LC72131MD
	Q6402		2SC2223
	Q6203		2SC2705
	Q6201 ,Q6202		2SC2712
	Q6214 ,Q6403		2SC2714
	Q6404		2SK302
	Q6401		3SK194
	Q6204		DTA124ES
	Q6205		DTC124EK
	D6202		1SS254
	D6401 ,D6402		1T363

COILS AND FILTERS

Mark	No.	Description	Parts No.
	L6404		ATC1003
	L6401		ATC1020
	L6402		ATC1021
	F6204		ATF-107
	F6203		ATF-119
	F6401		ATF-155
	F6206		ATF7008
	F6202 (455kHz)		ATF7011
	L6206 ,L6208 ,L6403		LAU2R2J

TRANSFORMERS

Mark	No.	Description	Parts No.
	T6201		ATB7008
	T6401		ATE7002

CAPACITORS

Mark	No.	Description	Parts No.
	C6407		CCSQCH010C50
	C6410		CCSQCH020C50
	C6401 ,C6419		CCSQCH050C50
	C6208		CCSQCH100D50
	C6212 ,C6274 ,C6275 ,C6408		CCSQCH101J50
	C6221 ,C6222 ,C6416		CCSQCH150J50
	C6271		CCSQCH200J50
	C6415		CCSQCH330J50
	C6414		CCSQPH080D50
	C6413		CCSQPH220J50
	C6405		CCSQTH180J50
	C6234 ,C6235		CEAL010M50
	C6245		CEAL470M16
	C6231		CEAS010M50
	C6224		CEAS100M50
	C6243		CEAS101M16
	C6227		CEAS220M16
	C6236		CEAS2R2M50
	C6216		CEAS330M16
	C6262		CEAS3R3M50
	C6219		CEAS470M10
	C6244		CEAS470M16
	C6249 ,C6250 ,C6265 ,C6266		CEAS4R7M50
	C6258		CEJA470M16
	C6215		CFTXA103J50
	C6214		CFTXA224J50
	C6211 ,C6254 ,C6403 ,C6406 ,C6412		CKSQYB102K50
	C6201 ,C6205 ,C6210 ,C6213 ,C6237		CKSQYB103K50
	C6276 ,C6278 ,C6280 ,C6281 ,C6402		CKSQYB103K50
	C6409 ,C6417 ,C6418		CKSQYB103K50
	C6251 ,C6252		CKSQYB153K50
	C6203 ,C6259		CKSQYB223K50
	C6228		CKSQYB472K50
	C6209		CKSQYB473K50
	C6230		CKSQYB821K50
	C6218 ,C6223 ,C6255		CKSQYF103Z50
	C6220 ,C6226 ,C6242 ,C6256		CKSQYF223Z50
	C6225		CKSQYF473Z50

RESISTORS

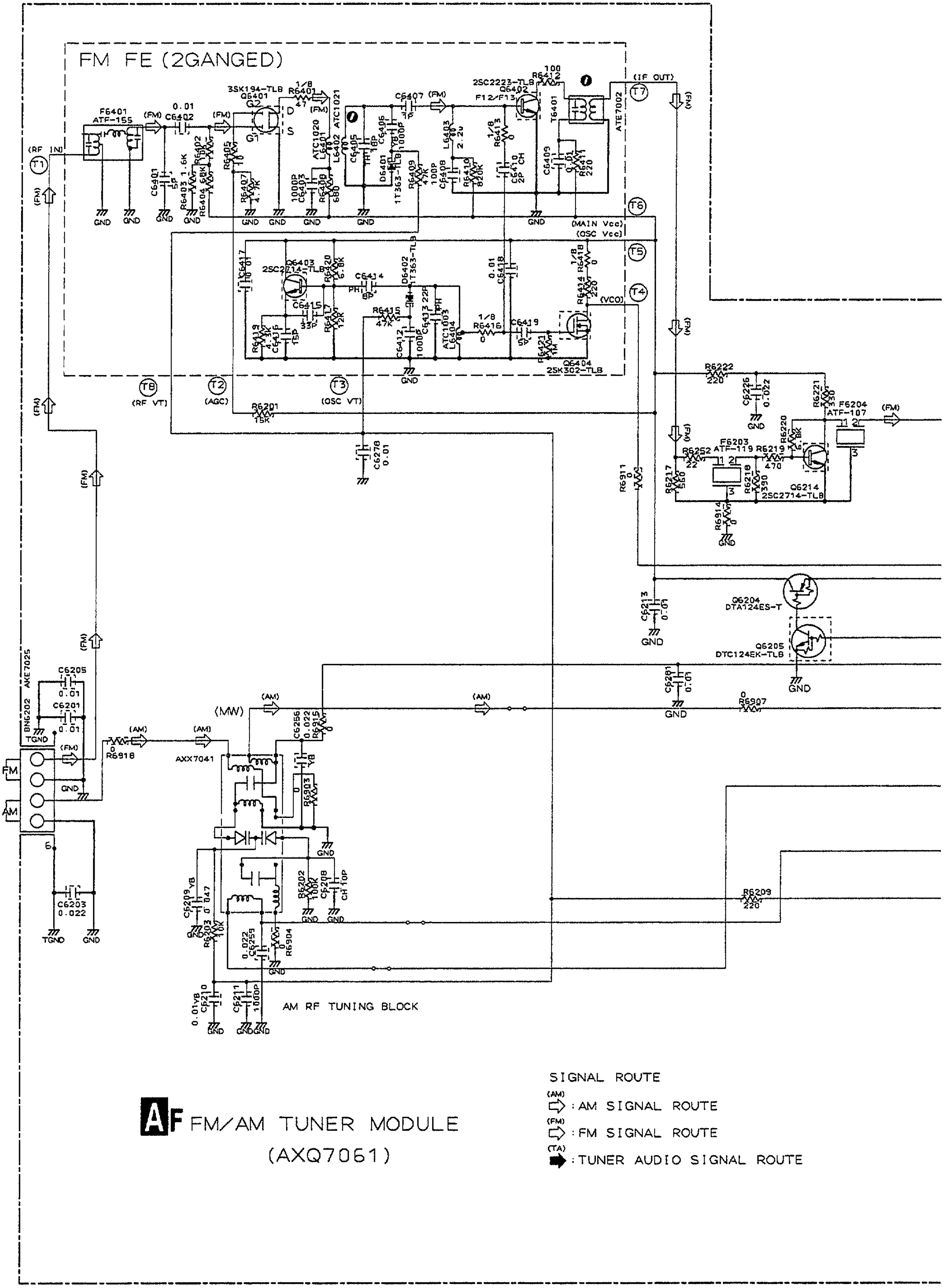
Mark	No.	Description	Parts No.
	R6280		RD1/4PU101J
	R6413 ,R6416 ,R6418 ,R6906 ,R6909		RS1/8S000J
	R6401		RS1/8S470J
	VR6201 (10kΩ)		RCP1045
	Other Resistors		RS1/10S□□□J

OTHERS

Mark	No.	Description	Parts No.
	BN6202	TERMINAL 4-P	AKE7025
	X6202	CRYSTAL RESONATOR (456kHz)	ASS1066
	X6201	CRYSTAL RESONATOR (7.2MHz)	ASS1093
	CN6201	14P SOCKET	KP200IA14L

2. SCHEMATIC DIAGRAM

2.1 FM/AM TUNER MODULE


FM FE (2GANGED)
(RF IN)
T1
F6401
ATF-155
C6401
C6402 0.01
R6402
R6403 1.6K
R6404
R6405
R6407 4.7K
3SK194-TLB
Q6401
R6401 1/8 47
G2
G1
D
S
ATC1020
L6401
L6402 ATC1021
C6403 1000P
R6408 680
C6405
C6406 18P
D6401 1T363-TLB
C6407
R6409 47K
C6408 100P
L6403 2.2u
R6410 820K
R6413 1/8 0
C6410 2P CH
2SC2223-TLB
Q6402
F12/F13
R6412 100
T6401
C6409
C6411 0.01
R6411 220
ATE7002
(IF OUT)
T7
T6
(MAIN Vcc)
(OSC Vcc)
T5
T4
(VCO)
C6417 0.01
2SC2714-TLB
Q6403
R6420 6.8K
C6414 8P
C6415 33P
C6416 15P
R6419 4.3K
R6417 12K
D6402 1T363-TLB
C6413 22P
R6415 47K
C6412 1000P
ATC1003
L6404
C6418 0.01
R6416 1/8 0
C6419
R6418 1/8 0
R6414 220
R6421 1M
Q6404
2SK302-TLB
T8
(RF VT)
T2
(AGC)
T3
(OSC VT)
R6201 15K
C6278 0.01
R6222 220
C6226 0.022
R6221 330
F6204
ATF-107
R6220 6.8K
F6203
ATF-119
R6252 22
R6219 470
R6217 560
R6218 390
Q6214
2SC2714-TLB
R6914 0
R6911 0
C6213 0.01
Q6204
DTA124ES-T
Q6205
DTC124EK-TLB
C6281 0.01
R6907 0
AKE7025
BN6202
C6205 0.01
C6201 0.01
TGND
FM
AM
R6918 0
(MW)
AXX7041
C6256 0.022
R6915 0
R6903 0
C6209 0.047 YB
R6203 10K
R6202 100K
C6208 10P CH
C6259 0.022
R6904 0
C6210 0.01YB
C6211 1000P
AM RF TUNING BLOCK
C6203 0.022
R6209 220
GND
(FM)
(AM)

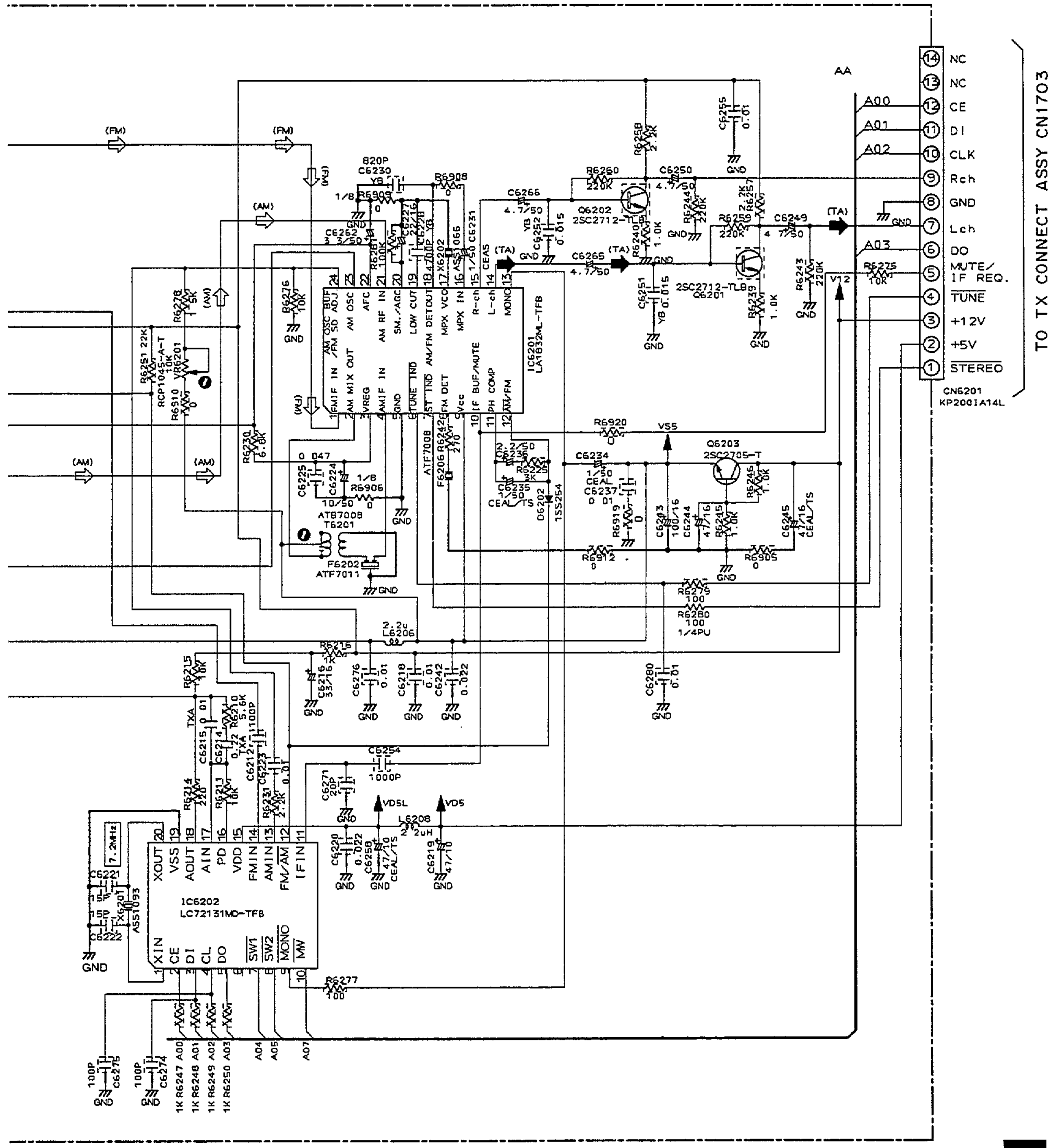
AF FM/AM TUNER MODULE
(AXQ7061)

SIGNAL ROUTE
(AM) ⇨ : AM SIGNAL ROUTE
(FM) ⇨ : FM SIGNAL ROUTE
(TA) ➡ : TUNER AUDIO SIGNAL ROUTE

- **When ordering service parts, be sure to refer to "PARTS LIST of EXPLODED VIEWS" or "PCB PARTS LIST".**

Notes

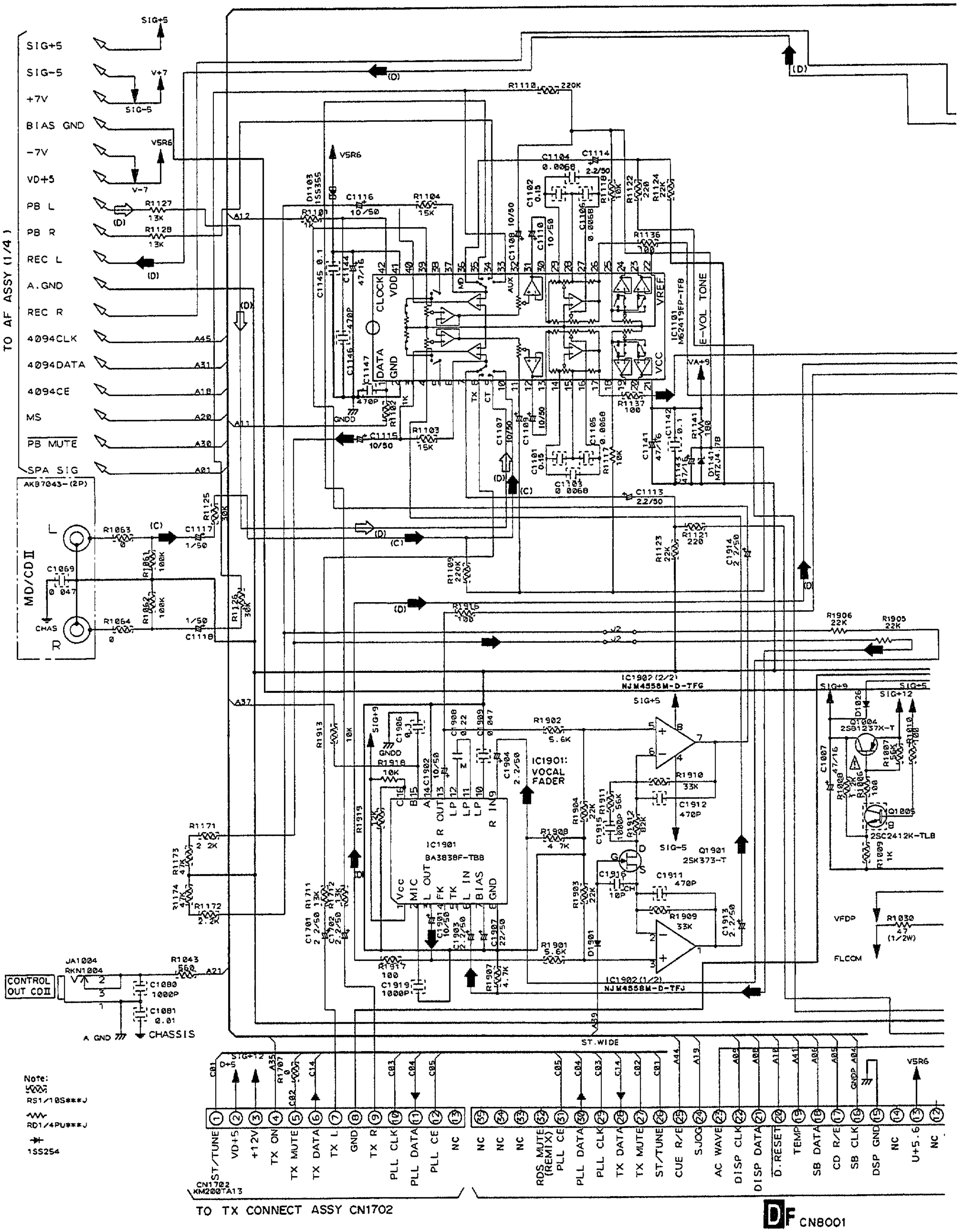
1. RESISTORS
   Indicated in Ω, 1/10W±5% Tolerance unless otherwise noted K:KΩ, M:MΩ.
2. CAPACITORS
   Indicated in Capacity(μF)/VOLTAGE(V) unless otherwise noted P:PF.

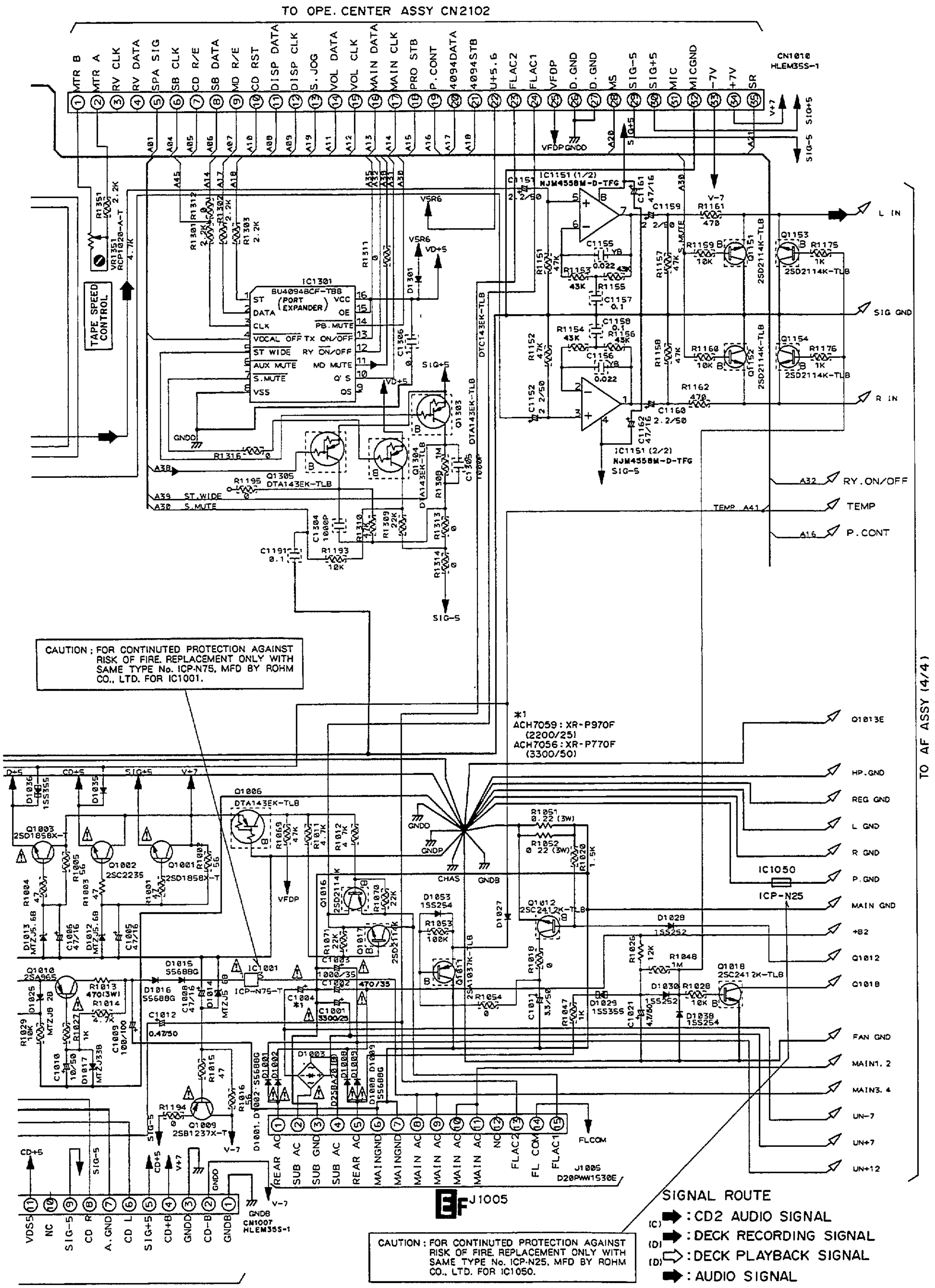


(FM)
(AM)
IC6201
LA1832ML-TFB
1 FMIF IN
2 AM MIX OUT
3 VREG
4 AMIF IN
5 GND
6 TUNE IND
7 ST IND
8 FM DET
9 Vcc
10 IF BUF/MUTE
11 PH COMP
12 AM/FM
13 MONO
14 L-ch
15 R-ch
16 MPX IN
17 MPX VCO
18 AM/FM DETOUT
19 LOW CUT
20 SM./AGC
21 AM RF IN
22 AFC
23 AM OSC
24 AM OSC BUF /FM SD ADJ
IC6202
LC72131MD-TFB
1 XIN
2 CE
3 DI
4 CL
5 DO
6 SW1
7 SW2
8 MONO
9 MW
10
11 IFIN
12 FM/AM
13 AMIN
14 FMIN
15 VDD
16 PD
17 AIN
18 AOUT
19 VSS
20 XOUT
Q6201 2SC2712-TLB
Q6202 2SC2712
Q6203 2SC2705-T
D6202 1SS254
VR6201 RCP1045-A-T 10K
T6201 ATB7008
F6202 ATF7011
F6206 ATF7008
X6202 ASS1066
X6201 ASS1093 7.2MHz
L6206 2.2u
L6208 2.2uH
VD5L
VD5
VSS
V12
(TA)
GND
AA
A00
A01
A02
A03
A04
A05
A07
TXA
CN6201
KP200IA14L
14 NC
13 NC
12 CE
11 DI
10 CLK
9 Rch
8 GND
7 Lch
6 DO
5 MUTE/ IF REQ.
4 TUNE
3 +12V
2 +5V
1 STEREO
TO TX CONNECT ASSY CN1703
C6230 820P YB
R6908 0
R6909 0 1/8
C6252 3.3/50
R6201 1.0K
C6221 0.22 YB
C6228 4700P YB
C6231 1/50
C6266 4.7/50
C6252 0.015 YB
C6265 4.7/50
R6260 220K
R6258 2.2K
C6255 0.01
C6250 4.7/50
R6244 220K
R6257 2.2K
R6240 1.0K
R6259 220K
C6249 4.7/50
C6251 0.015 YB
R6239 1.0K
R6243 220K
R6275 10K
R6276 10K
R6278 1.5K
R6251 22K
R6510 0
R6230 6.8K
C6225 0.047
C6224 10/50
R6906 0 1/8
R6242 270
C6236 2.2/50
R6225 3K
C6235 1/50 CEAL/TS
R6920 0
C6234 1/50 CEAL
C6237 0.01
R6919 0
C6243 100/16
C6244 47/16
R6245 1.0K
R6246 1.0K
C6245 47/16 CEAL/TS
R6912 0
R6905 0
R6279 100
R6280 100 1/4PU
C6280 0.01
R6216 1K
C6216 33/16
C6276 0.01
C6218 0.01
C6242 0.022
R6215 10K
R6210 5.6K
C6215 0.01
C6214 0.22
C6212 1100P
C6223 0.01
C6254 1000P
C6271 20P
R6214 220
R6211 10K
R6231 2.2K
C6220 0.022
C6258 47/10 CEAL/TS
C6219 47/10
C6221 15P
C6222 15P
R6277 100
C6275 100P
C6274 100P
R6247 1K
R6248 1K
R6249 1K
R6250 1K

2.2 AF ASSY (2/4)

BF AF ASSY (2/4)
(AWZ8420: XR-P770F)


SIG+5
SIG-5
+7V
BIAS GND
-7V
VD+5
PB L
PB R
REC L
A.GND
REC R
4094CLK
4094DATA
4094CE
MS
PB MUTE
SPA SIG
TO AF ASSY (1/4)
AKB7043-(2P)
MD/CD II
L
R
CHAS
V+7
SIG-5
V5R6
V-7
R1127 13K
R1128 13K
R1063 0
R1064 0
R1061 100K
R1062 100K
C1069 0.047
C1117 1/50
C1118 1/50
R1125 30K
R1126 30K
D1103 1SS355
V5R6
C1116 10/50
R1104 15K
R1101
R1110 220K
C1104 0.0068
C1114 2.2/50
C1102 0.15
C1106 0.0068
R1118 10K
R1122 220
R1124 22K
R1136
C1108 10/50
C1110 10/50
C1145 0.1
C1144 47/16
C1146 470P
C1147 470P
CLOCK
VDD
DATA
GND
GNDD
R1102 1K
AUX
MD
TX
CT
VREF
VCC
IC1101 M62419FP-TF8
E-VOL TONE
VA+9
C1115 10/50
R1103 15K
C1107 10/50
C1109 10/50
C1101 0.15
C1103 0.0068
C1105 0.0068
R1117 10K
R1137 100
C1141 47/16
C1142 0.1
R1141 100
C1143 47/16
D1141 MTZJ4.7B
C1113 2.2/50
R1121 220
R1123 22K
R1109 220K
C1914 2.2/50
R1916 100
R1906 22K
R1905 22K
IC1902 (2/2) NJM4558M-D-TFG
SIG+5
R1902 5.6K
R1910 33K
C1912 470P
SIG-5
Q1901 2SK373-T
R1911 56K
C1915 1000P
R1912 82K
R1904 22K
R1908 4.7K
C1916 10P
C1911 470P
R1909 33K
R1903 22K
D1901
R1901 5.6K
C1913 2.2/50
IC1902 (1/2) NJM4558M-D-TFJ
R1913 10K
SIG+9
C1906 0.1
GNDD
R1918 10K
C1902 10/50
C1908 0.22
C1909 0.047
C1904 2.2/50
IC1901: VOCAL FADER
IC1901 BA3838F-TBB
Vcc MIC L OUT FK TK L IN BIAS GND
R OUT LP LP LP R IN
R1919 13K
R1711 13K
R1712 13K
C1701 2.2/50
C1702 2.2/50
C1901 10/50
C1903 2.2/50
C1907 22/50
R1917 100
C1919 1000P
R1907 4.7K
SIG+9
SIG+12
D1026
Q1004 2SB1237X-T
C1007 47/16
R1007 56K
R1010 100
R1008 2.2K
R1006 100
Q1005 2SC2412K-TLB
R1009 1K
VFDP
R1030 47 (1/2W)
FLCOM
R1171 2.2K
R1172 2.2K
R1173 4.7K
R1174 4.7K
JA1004 RKN1004
CONTROL OUT CD II
R1043 560
C1080 1000P
C1081 0.01
A GND
CHASSIS
A12 A45 A31 A18 A20 A11 A30 A01 A37 A21 A39 A35 A44 A19 A09 A08 A10 A41 A06 A05 A04
(C) (D)
ST.WIDE
V5R6
GNDP
① ST/TUNE
② VD+5
③ +12V
④ TX ON
⑤ TX MUTE
⑥ TX DATA
⑦ TX L
⑧ GND
⑨ TX R
⑩ PLL CLK
⑪ PLL DATA
⑫ PLL CE
⑬ NC
(35) NC
(34) NC
(33) NC
(32) RDS MUTE (REMIX)
(31) PLL CE
㉚ PLL DATA
㉙ PLL CLK
㉘ TX DATA
㉗ TX MUTE
㉖ ST/TUNE
㉕ CUE R/E
㉔ SJOG
㉓ AC WAVE
㉒ DISP CLK
㉑ DISP DATA
⑳ D.RESET
⑲ TEMP
⑱ SB DATA
⑰ CD R/E
⑯ SB CLK
⑮ DSP GND
⑭ NC
⑬ U+5.6
⑫ NC
C01 D+5 SIG+12 R1707 0 C02 C14 C03 C04 C05
CN1702 KM200TA13
TO TX CONNECT ASSY CN1702
DF CN8001
Note:
RS1/10S***J
RD1/4PU***J
1SS254


TO OPE. CENTER ASSY CN2102
MTR B
MTR A
RV CLK
RV DATA
SPA SIG
SB CLK
CD R/E
SB DATA
MD R/E
CD RST
DISP DATA
DISP CLK
S. JOG
VOL DATA
VOL CLK
MAIN DATA
MAIN CLK
PRO STB
P. CONT
4094DATA
4094STB
U+5.6
FLAC2
FLAC1
VFDP
D. GND
D. GND
MS
SIG-5
SIG+5
MIC
MICGND
-7V
+7V
SR
CN1010
HLEM35S-1
TAPE SPEED CONTROL
VR1351
RCP1020-A-T
IC1301
BU4094BCF-TBB
(PORT EXPANDER)
IC1151 (1/2)
NJM4558M-D-TFG
IC1151 (2/2)
NJM4558M-D-TFG
L IN
SIG GND
R IN
RY. ON/OFF
TEMP
P. CONT
Q1013E
HP. GND
REG GND
L GND
R GND
P. GND
MAIN GND
+B2
Q1012
Q1018
FAN GND
MAIN1. 2
MAIN3. 4
UN-7
UN+7
UN+12
TO AF ASSY (4/4)
IC1050
ICP-N25
IC1001
ICP-N75-T
*1
ACH7059 : XR-P970F
(2200/25)
ACH7056 : XR-P770F
(3300/50)
J1005
D20PWW1S30E
REAR AC
SUB AC
SUB GND
SUB AC
REAR AC
MAINGND
MAINGND
MAIN AC
MAIN AC
MAIN AC
MAIN AC
NC
FLAC2
FL COM
FLAC1
FLCOM
CN1007
HLEM35S-1
VDSS
NC
SIG-5
CD R
A. GND
CD L
SIG+5
CD+B
GNDD
CD-B
GNDB
EF J1005

CAUTION : FOR CONTINUTED PROTECTION AGAINST RISK OF FIRE. REPLACEMENT ONLY WITH SAME TYPE No. ICP-N75, MFD BY ROHM CO., LTD. FOR IC1001.

CAUTION : FOR CONTINUTED PROTECTION AGAINST RISK OF FIRE. REPLACEMENT ONLY WITH SAME TYPE No. ICP-N25, MFD BY ROHM CO., LTD. FOR IC1050.

SIGNAL ROUTE

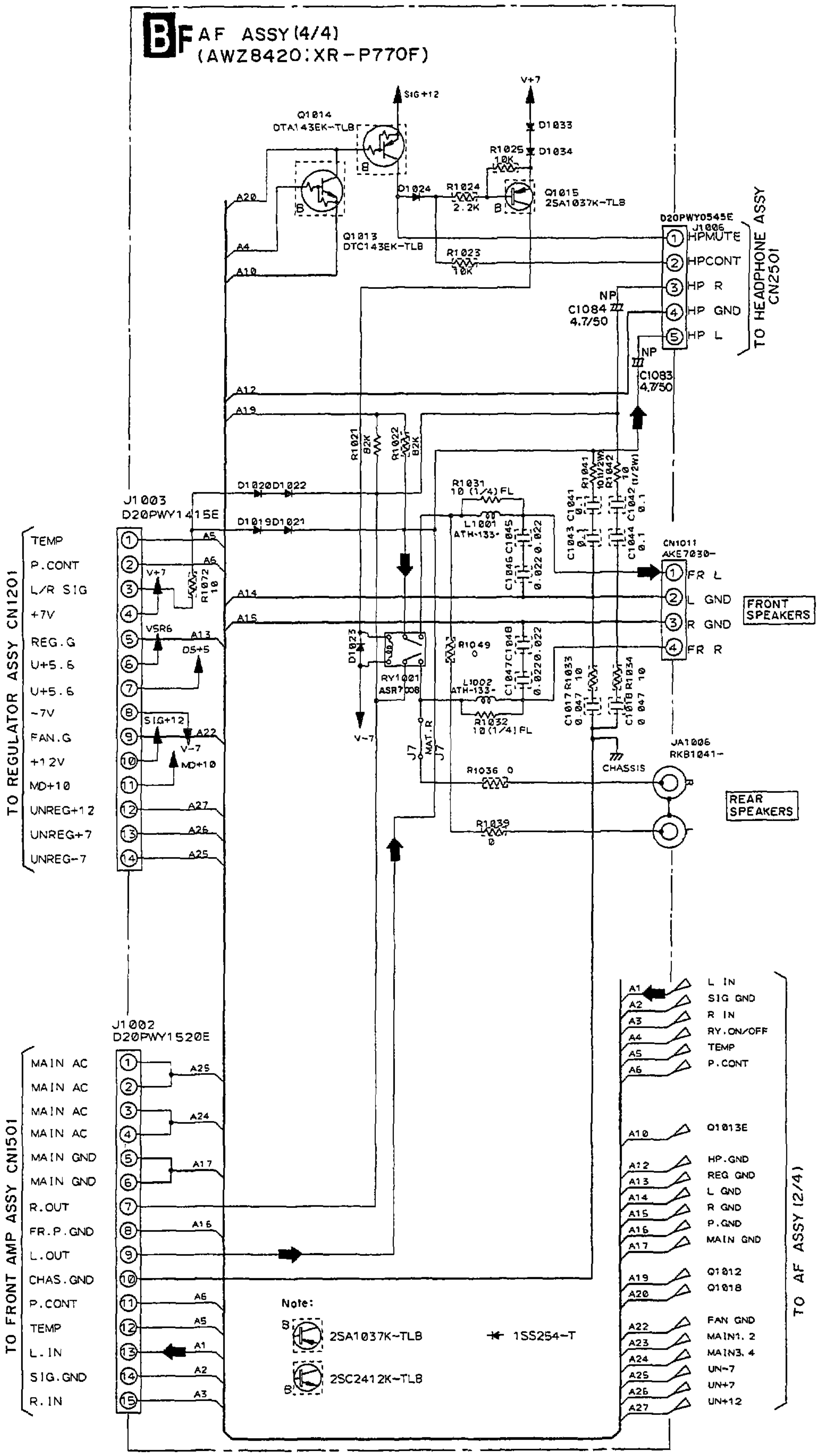
(C) ➡ : CD2 AUDIO SIGNAL

(D) ➡ : DECK RECORDING SIGNAL

(D) ⇨ : DECK PLAYBACK SIGNAL

➡ : AUDIO SIGNAL

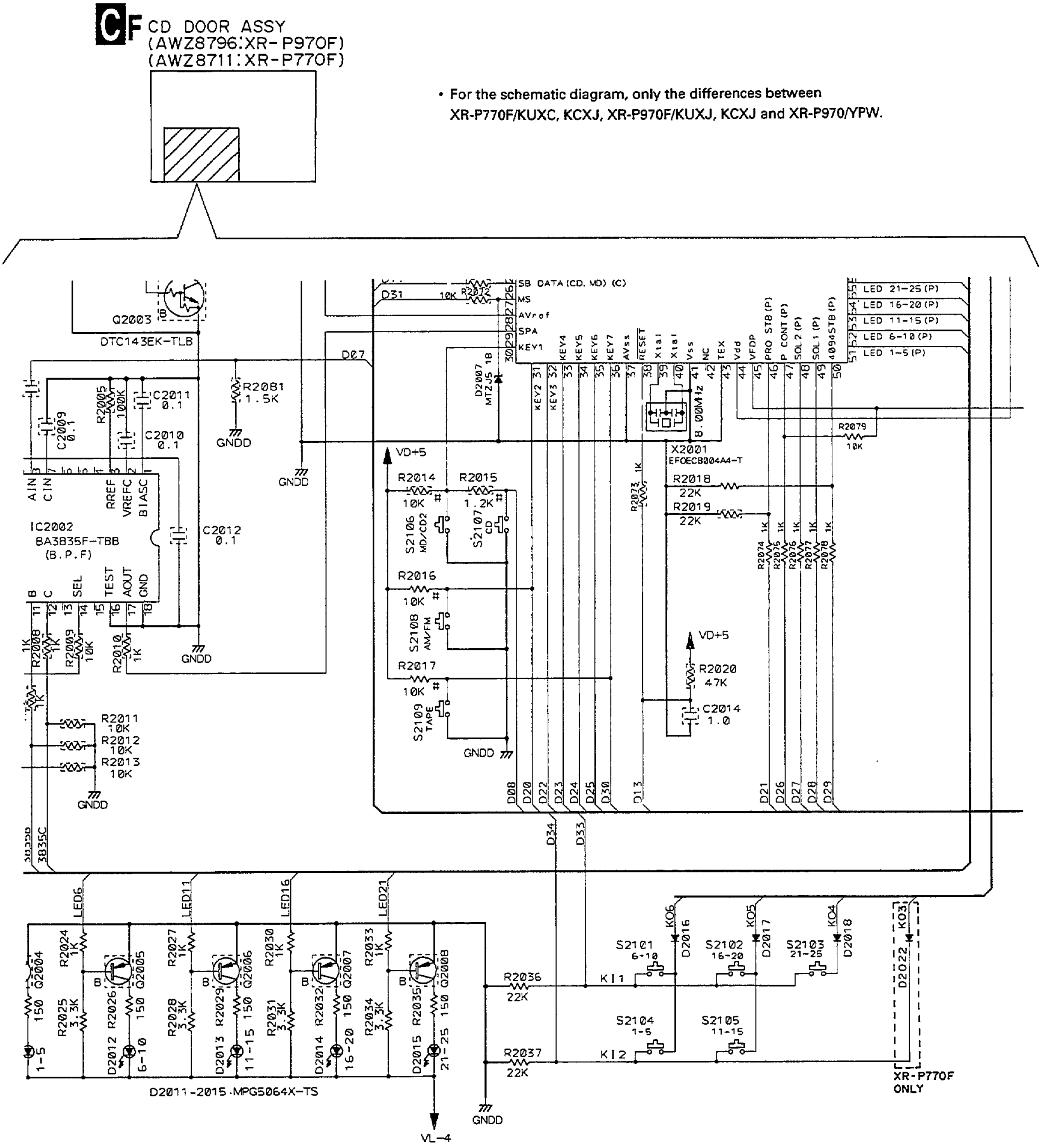
2.3 AF ASSY (4/4)


B F AF ASSY (4/4)
(AWZ8420:XR-P770F)
SIG+12
V+7
Q1014
DTA143EK-TLB
D1033
D1034
R1025
10K
D1024
R1024
2.2K
Q1015
2SA1037K-TLB
Q1013
DTC143EK-TLB
R1023
10K
D20PWY0545E
J1006
1 HPMUTE
2 HPCONT
3 HP R
4 HP GND
5 HP L
TO HEADPHONE ASSY CN2501
NP
C1084
4.7/50
NP
C1083
4.7/50
A20
A4
A10
A12
A19
R1021
82K
R1022
82K
D1020 D1022
D1019 D1021
R1031
10 (1/4) FL
L1001
ATH-133-
C1045
0.022
C1046
0.022
R1041
10 (1/2W)
R1042
10 (1/2W)
C1041
0.1
C1042
0.1
C1043
0.1
C1044
0.1
CN1011
AKE7030-
1 FR L
2 L GND
3 R GND
4 FR R
FRONT SPEAKERS
J1003
D20PWY1415E
TO REGULATOR ASSY CN1201
1 TEMP
2 P.CONT
3 L/R SIG
4 +7V
5 REG.G
6 U+5.6
7 U+5.6
8 -7V
9 FAN.G
10 +12V
11 MD+10
12 UNREG+12
13 UNREG+7
14 UNREG-7
A5
A6
V+7
R1072
10
A14
A15
VSR6
A13
D5+5
SIG+12
A22
V-7
MD+10
A27
A26
A25
D1023
RY1001
ASR7008
R1049
0
C1047
0.022
C1048
0.022
L1002
ATH-133-
R1032
10 (1/4) FL
R1033
10
R1034
10
C1017
0.047
C1018
0.047
V-7
J7
MAT.R
J7
CHASSIS
JA1006
RKB1041-
R1036 0
R1039
0
REAR SPEAKERS
J1002
D20PWY1520E
TO FRONT AMP ASSY CN1501
1 MAIN AC
2 MAIN AC
3 MAIN AC
4 MAIN AC
5 MAIN GND
6 MAIN GND
7 R.OUT
8 FR.P.GND
9 L.OUT
10 CHAS.GND
11 P.CONT
12 TEMP
13 L.IN
14 SIG.GND
15 R.IN
A25
A24
A17
A16
A6
A5
A1
A2
A3
Note:
2SA1037K-TLB
2SC2412K-TLB
1SS254-T
TO AF ASSY (2/4)
A1 L IN
A2 SIG GND
A3 R IN
A4 RY.ON/OFF
A5 TEMP
A6 P.CONT
A10 Q1013E
A12 HP.GND
A13 REG GND
A14 L GND
A15 R GND
A16 P.GND
A17 MAIN GND
A19 Q1012
A20 Q1018
A22 FAN GND
A23 MAIN1, 2
A24 MAIN3, 4
A25 UN-7
A26 UN+7
A27 UN+12

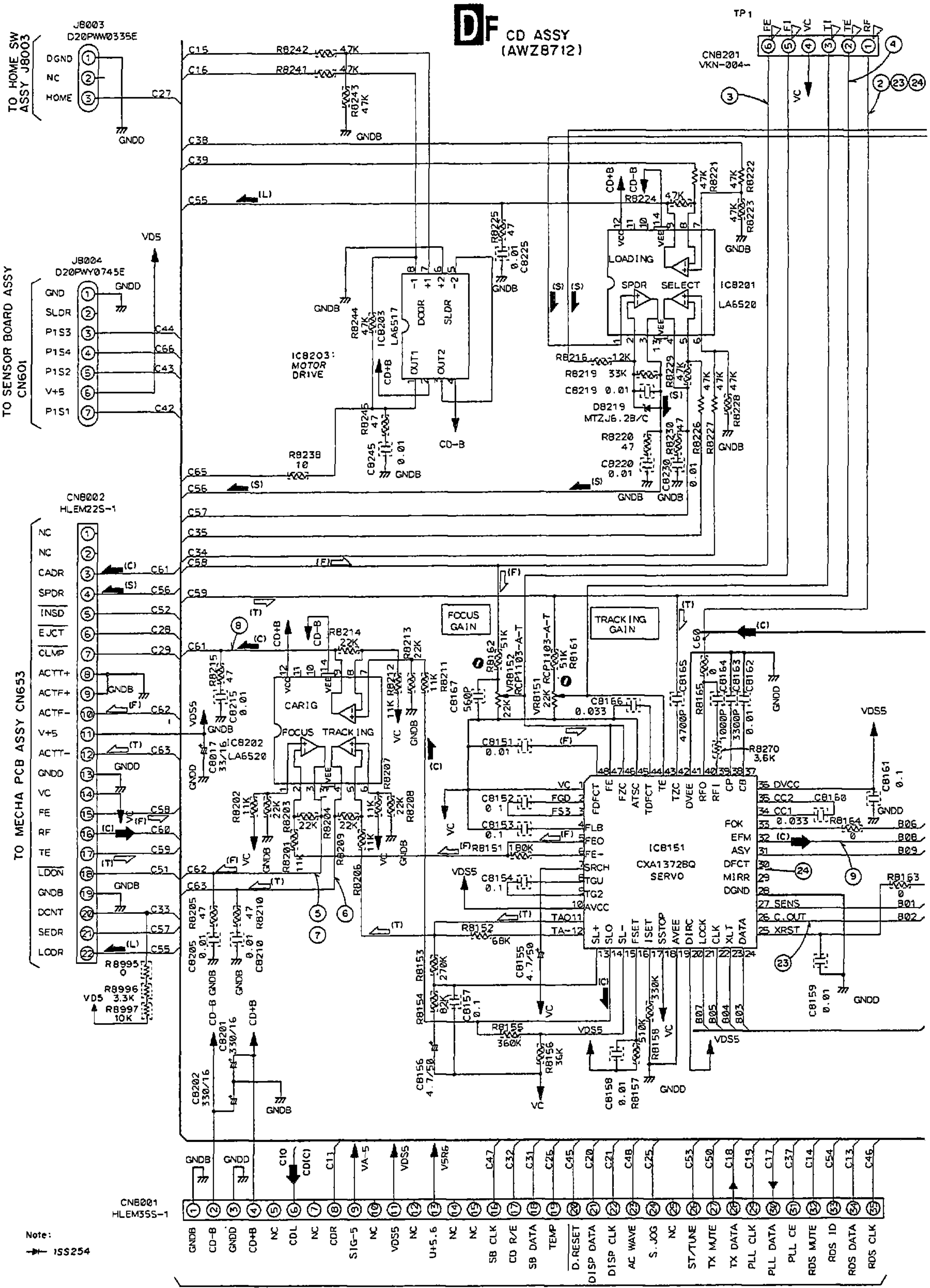
SIGNAL ROUTE
➡: AUDIO SIGNAL

2.4 CD DOOR ASSY

- For the schematic diagram, only the differences between XR-P770F/KUXC, KCXJ, XR-P970F/KUXJ, KCXJ and XR-P970/YPW.


CF CD DOOR ASSY
(AWZ8796:XR-P970F)
(AWZ8711:XR-P770F)
Q2003
DTC143EK-TLB
D07
R2081 1.5K
GNDD
C2011 0.1
R2005 100K
C2009 0.1
C2010 0.1
IC2002
BA3835F-TBB
(B.P.F)
AIN
CIN
RREF
VREFC
BIASC
C2012 0.1
B
C
SEL
TEST
AOUT
GND
R2008 1K
R2009 1K
10K
R2010 1K
R2011 10K
R2012 10K
R2013 10K
3835C
D31
10K R2072
SB DATA (CD, MD) (C)
MS
AVref
SPA
KEY1
D2007 MTZJ5.1B
KEY2
KEY3
KEY4
KEY5
KEY6
KEY7
AVss
RESET
Xtal
Xtal
Vss
NC
TEX
Vdd
VFDP
PRO STB (P)
P CONT (P)
SOL 2 (P)
SOL 1 (P)
4094STB (P)
LED 21~25 (P)
LED 16~20 (P)
LED 11~15 (P)
LED 6~10 (P)
LED 1~5 (P)
8.00MHz
X2001
EF0ECB004A4-T
R2079 10K
VD+5
R2014 10K
R2015 1.2K
S2106 MD/CD2
S2107 CD
R2016 10K
S2108 AM/FM
R2017 10K
S2109 TAPE
GNDD
R2073 1K
R2018 22K
R2019 22K
R2074 1K
R2075 1K
R2076 1K
R2077 1K
R2078 1K
VD+5
R2020 47K
C2014 1.0
D08 D20 D22 D23 D24 D25 D30 D13 D21 D26 D27 D28 D29
D34
D33
LED6
LED11
LED16
LED21
Q2004 150
R2024 1K
R2025 3.3K
R2026
Q2005 150
D2012 6-10
1-5
R2027 1K
R2028 3.3K
R2029
Q2006 150
D2013 11-15
R2030 1K
R2031 3.3K
R2032
Q2007 150
D2014 16-20
R2033 1K
R2034 3.3K
R2035
Q2008 150
D2015 21-25
D2011-2015 MPG5064X-TS
VL-4
R2036 22K
R2037 22K
GNDD
KI1
KI2
KO6
KO5
KO4
KO3
D2016
D2017
D2018
D2022
S2101 6-10
S2102 16-20
S2103 21-25
S2104 1-5
S2105 11-15
XR-P770F ONLY

2.5 CD ASSY


DF CD ASSY (AWZ8712)
J8003 D20PWW0335E
TO HOME SW ASSY J8003
DGND
NC
HOME
GNDD
J8004 D20PWY0745E
TO SENSOR BOARD ASSY CN601
GND
SLDR
P1S3
P1S4
P1S2
V+5
P1S1
VD5
CN8002 HLEM22S-1
TO MECHA PCB ASSY CN653
NC
NC
CADR
SPDR
INSD
EJCT
CLMP
ACTT+
ACTF+
ACTF-
V+5
ACTT-
GNDD
VC
FE
RF
TE
LDON
GNDB
DCNT
SEDR
LCDR
R8242 4.7K
R8241 4.7K
R8243 47K
GNDB
IC8203: MOTOR DRIVE
IC8203 LA6517
DOOR
SLDR
OUT1
OUT2
CD-B
CD+B
R8238 10
C8245 0.01
R8245 47
R8244 47K
R8225 47
C8225 0.01
IC8201 LA6520
LOADING
SPDR
SELECT
R8224 47K
R8221 47K
R8222 47K
R8223 47K
R8216 12K
R8219 33K
C8219 0.01
D8219 MTZJ6.2B/C
R8220 47
C8220 0.01
R8230 47
C8230
R8229 47K
R8226
R8227
R8228 47K
TP1
FE
FI
VC
TI
TE
RF
CN8201 VKN-004-
IC8202 LA6520
CARIG
FOCUS
TRACKING
C8017 33/16
R8214 22K
R8213 22K
R8212 11K
R8211 11K
R8215 47
C8215 0.01
R8202 11K
R8203 22K
R8204 22K
R8201 11K
R8209 11K
R8206
R8207
R8208 22K
R8205 47
C8205 0.01
R8210 47
C8210 0.01
C8201 330/16
C8202 330/16
FOCUS GAIN
TRACKING GAIN
R8162 51K
VR8152 22K RCP1103-A-T
VR8151 22K RCP1103-A-T
R8161 51K
C8167 560P
C8166 0.033
C8165 4700P
R8165 0
C8164 1000P
C8163 3300P
C8162 0.01
C8151 0.01
C8152 0.1
C8153 0.1
R8151 180K
C8154 0.1
R8152 68K
C8155 4.7/50
C8156 4.7/50
R8153 270K
R8154 82K
C8157 0.1
R8155 360K
R8156 36K
R8157 510K
R8158 330K
C8158 0.01
C8159 0.01
C8160
R8164 0
C8161 0.1
R8163 0
R8270 3.6K
IC8151 CXA1372BQ SERVO
FDFCT FE FZC ATSC TDFCT TE TZC DVEE RFO RFI CP CB
DVCC CC2 CC1 FOK EFM ASY DFCT MIRR DGND SENS C.OUT XRST
FGD FS3 FLB FEO FE- SRCH TGU TG2 AVCC TAO TA-
SL+ SLO SL- FSET ISET SSTOP AVEE DIRC LOCK CLK XLT DATA
VDS5
GNDD
B01 B02 B03 B04 B05 B06 B07 B08 B09
CN8001 HLEM35S-1
GNDB CD-B GNDD CD+B NC CDL NC CDR SIG-5 NC VDS5 NC U+5.6 NC NC SB CLK CD R/E SB DATA TEMP D.RESET DISP DATA DISP CLK AC WAVE S.JOG NC ST/TUNE TX MUTE TX DATA PLL CLK PLL DATA PLL CE RDS MUTE RDS ID RDS DATA RDS CLK
VA-5
V5R6
R8995 0
R8996 3.3K
R8997 10K
Note: 1SS254
BF2/4 CN1007

SIGNAL ROUTE

(C)➡ : CD AUDIO SIGNAL

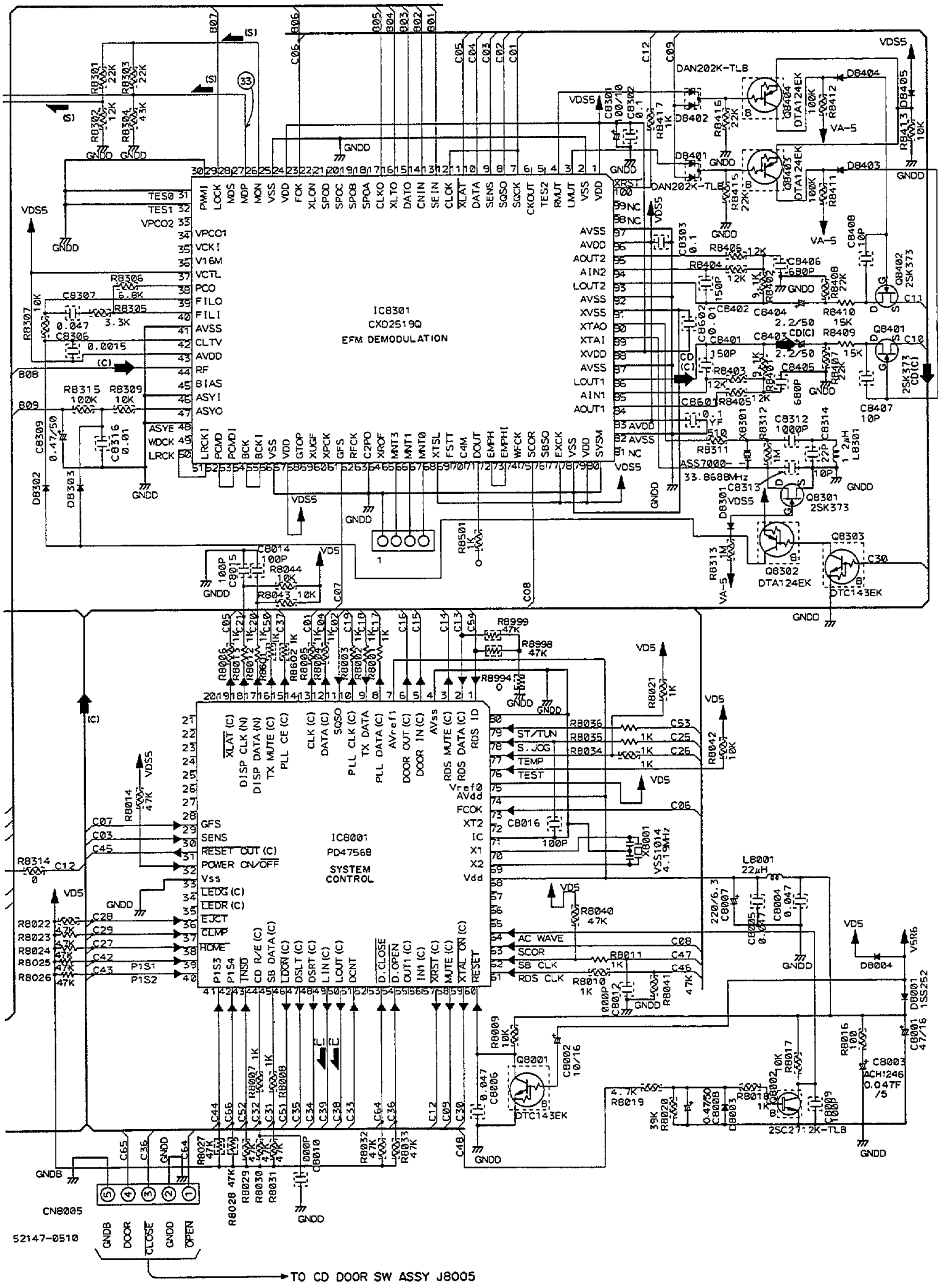
(F)▭ : FOCUS SERVO LOOP LINE

(T)△ : TRACKING SERVO LOOP LINE

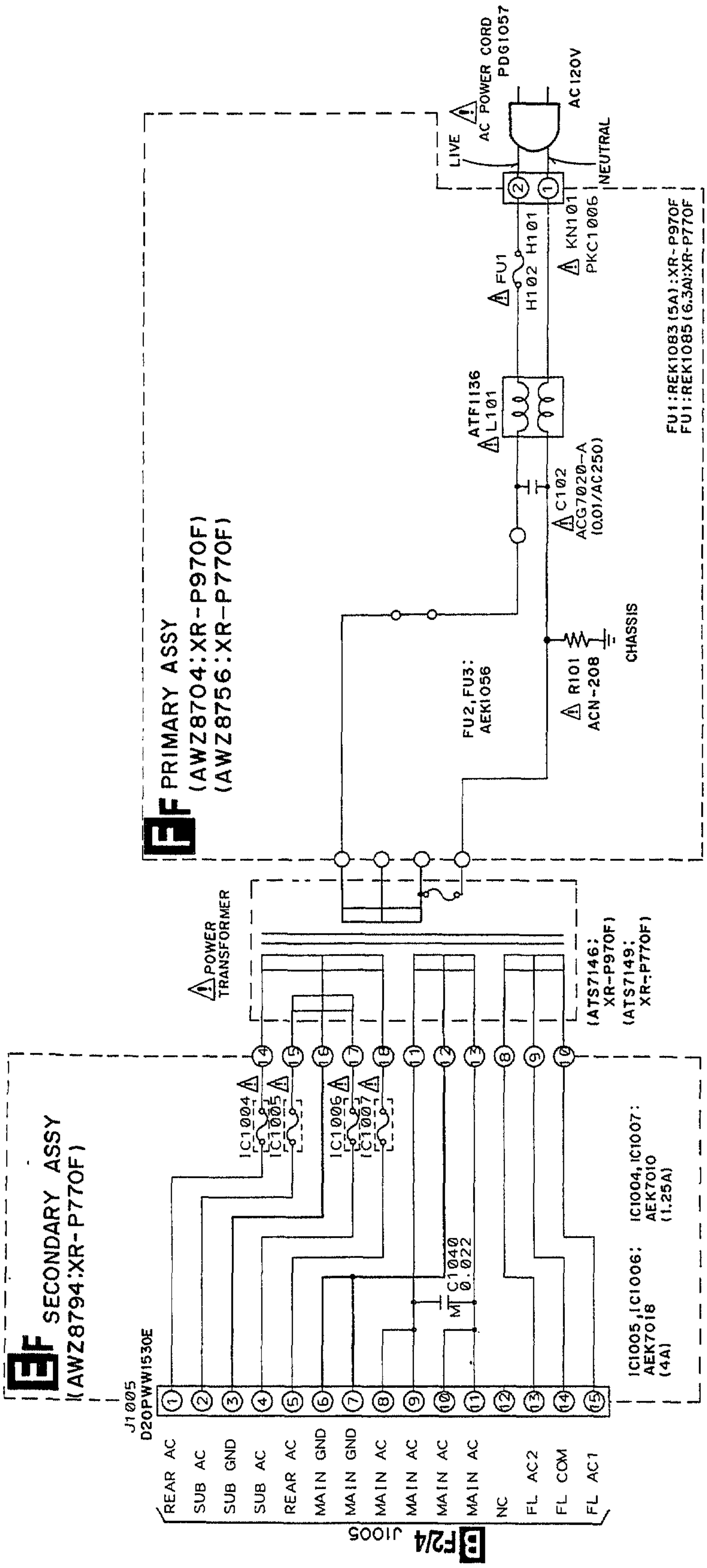
(L)▲ : LOADING MOTOR ROUTE

(S)▲ : SPINDLE MOTOR ROUTE

(C)▲ : CARRIAGE MOTOR ROUTE


IC8301
CXD2519Q
EFM DEMODULATION
IC8001
PD47568
SYSTEM
CONTROL
VDS5
GNDD
VA-5
VD5
V5R6
DAN202K-TLB
Q8404 DTA124EK
Q8403 DTA124EK
Q8402 2SK373
Q8401 2SK373
Q8301 2SK373
Q8302 DTA124EK
Q8303 DTC143EK
Q8001 DTC143EK
Q8002 2SC2712K-TLB
D8404
D8403
D8405
D8401
D8402
D8301
D8302
D8303
D8001 1SS252
D8003
D8004
X8301 ASS7000-
33.8688MHz
X8001 VSS1014 4.19MHz
L8301 1.2μH
L8001 22μH
C8003 ACH1246 0.047F /5
ST/TUN
S.JOG
TEMP
TEST
AC WAVE
SCOR
SB CLK
RDS CLK
CN8005
52147-0510
GNDB
DOOR
CLOSE
GNDD
OPEN
TO CD DOOR SW ASSY J8005

2.6 PRIMARY ASSY AND SECONDARY ASSY


F PRIMARY ASSY
(AWZ8704:XR-P970F)
(AWZ8756:XR-P770F)
AC POWER CORD
PDG1057
AC120V
LIVE
NEUTRAL
FU1
H102
H101
KN101
PKC1006
ATF1136
L101
C102
ACG7020-A
(0.01/AC250)
FU2,FU3:
AEK1056
R101
ACN-208
CHASSIS
FU1:REK1083(5A):XR-P970F
FU1:REK1085(6.3A):XR-P770F
POWER TRANSFORMER
(ATS7146:
XR-P970F)
(ATS7149:
XR-P770F)
F SECONDARY ASSY
(AWZ8794:XR-P770F)
IC1004
IC1005
IC1006
IC1007
C1040
0.022
IC1004,IC1007:
AEK7010
(1.25A)
IC1005,IC1006:
AEK7018
(4A)
J1005
D20PWW1530E
REAR AC
SUB AC
SUB GND
SUB AC
REAR AC
MAIN GND
MAIN GND
MAIN AC
MAIN AC
MAIN AC
MAIN AC
NC
FL AC2
FL COM
FL AC1
F2/4 J1005

● NOTE FOR FUSE REPLACEMENT

CAUTION - FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE AND RATINGS ONLY.

CAUTION ; FOR CONTINUTED PROTECTION AGAINST RISK OF FIRE. REPLACEMENT ONLY WITH SAME TYPE No. AEK7018. FOR IC1005 AND IC1006.

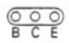
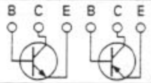
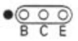
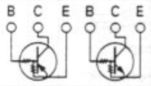
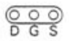
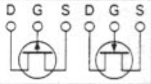
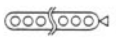
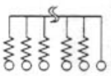
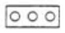
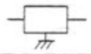
CAUTION ; FOR CONTINUTED PROTECTION AGAINST RISK OF FIRE. REPLACEMENT ONLY WITH SAME TYPE No. AEK7010. FOR IC1004 AND IC1007.

3. PCB CONNECTION DIAGRAM

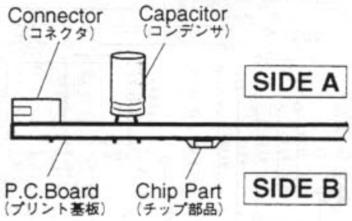
3.1 PRIMARY ASSY

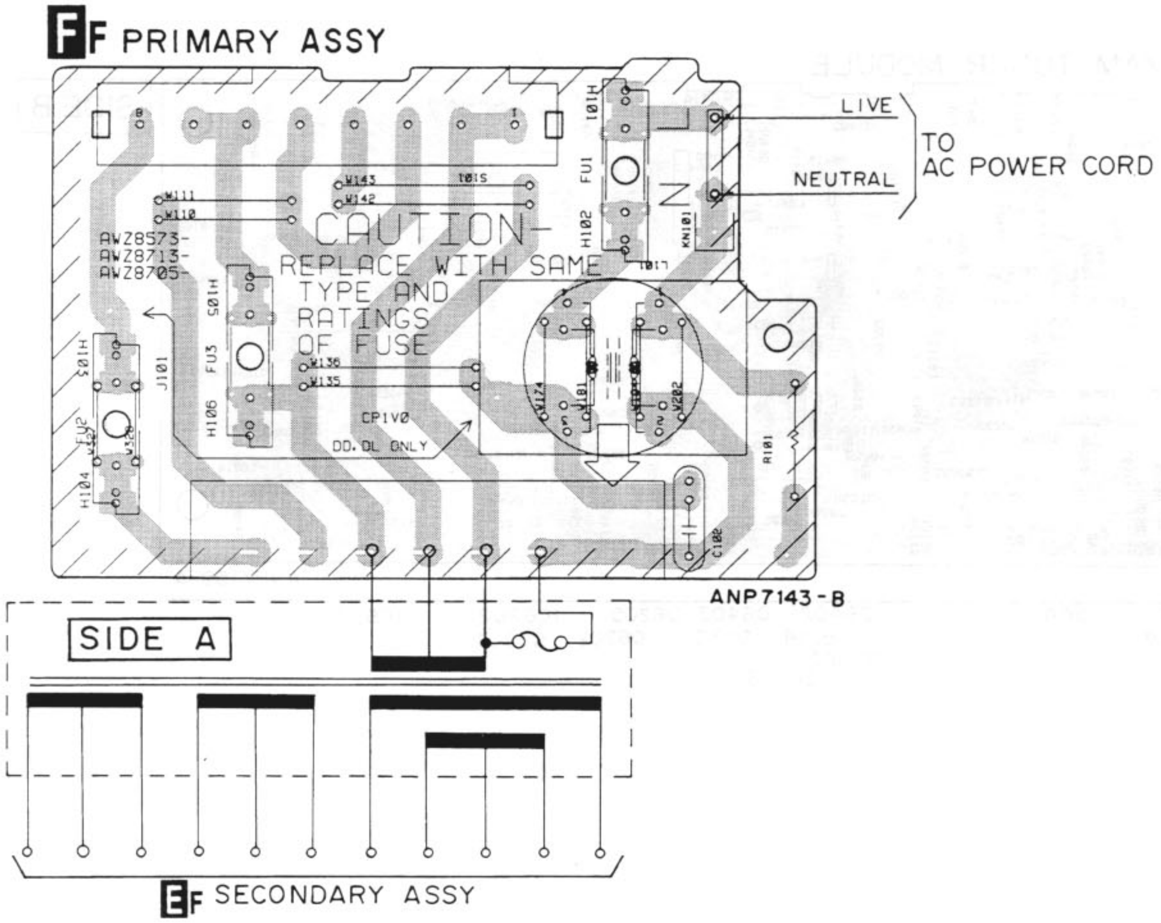
NOTE FOR PCB DIAGRAMS:

1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

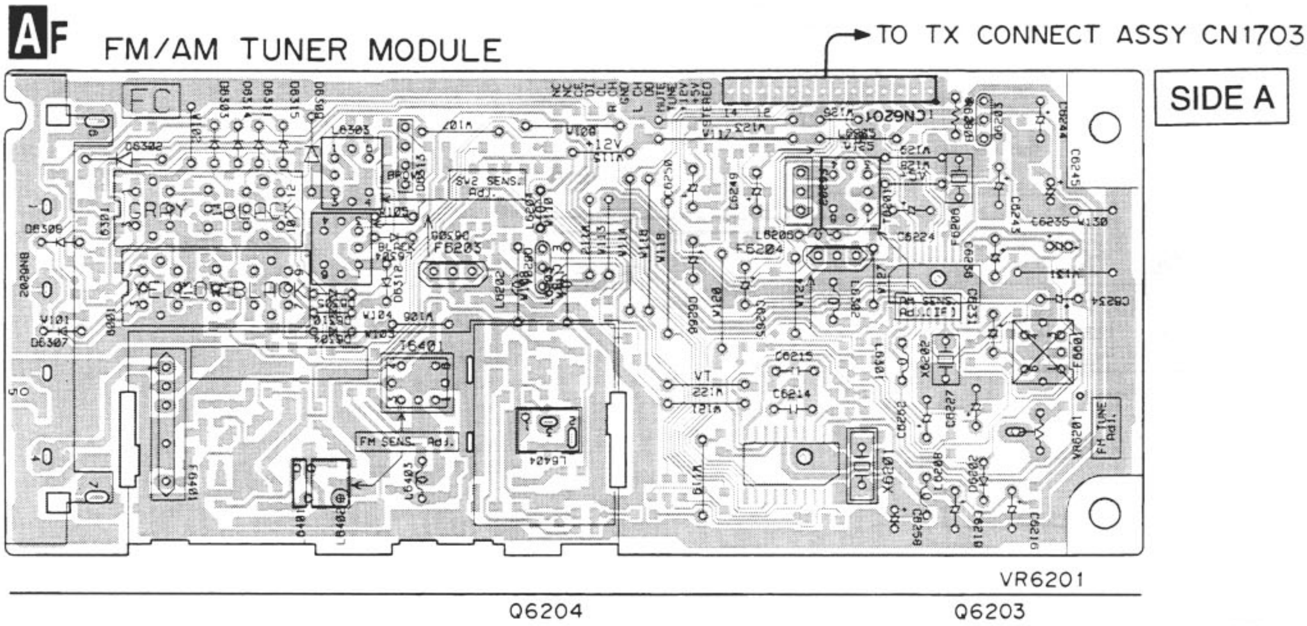
Symbol in PCB Diagrams	Symbol in Schematic Diagrams	Part Name
		Transistor
		Transistor with resistor
		Field effect transistor
		Resistor array
		3-terminal regulator

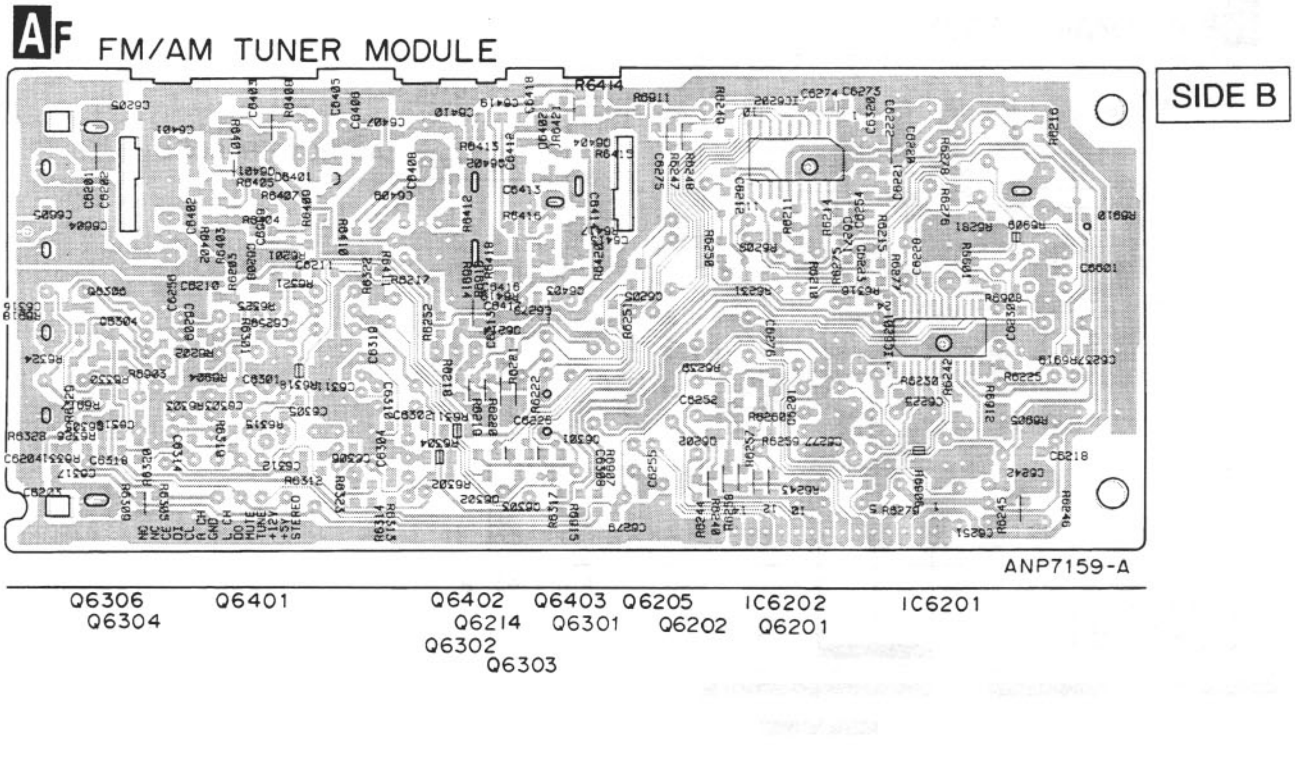
3. The parts mounted on this PCB include all necessary parts for several destinations. For further infromation for respective destinations, be sure to check with the schematic diagram.
4. Viewpoint of PCB diagrams


Connector
(コネクタ)
Capacitor
(コンデンサ)
SIDE A
P.C.Board
(プリント基板)
Chip Part
(チップ部品)
SIDE B


F PRIMARY ASSY
LIVE
NEUTRAL
TO AC POWER CORD
H101
FU1
H102
KN101
W111
W110
W143
W142
CAUTION-
REPLACE WITH SAME
TYPE AND
RATINGS
OF FUSE
AWZ8573-
AWZ8713-
AWZ8705-
H105
FU3
H106
J101
H103
FU2
H104
W136
W135
CP1V0
DD.DL ONLY
R101
C100
ANP7143-B
SIDE A
F SECONDARY ASSY

3.2 FM/AM TUNER MODULE


AF
FM/AM TUNER MODULE
TO TX CONNECT ASSY CN1703
SIDE A
GRAY BLACK
YELLOW BLACK
SV2 SENS. Adj.
FM SENS. Adj.
AM SENS. Adj.(IF)
FM TUNE Adj.
CN6201
VR6201
Q6204
Q6203


AF
FM/AM TUNER MODULE
SIDE B
ANP7159-A
Q6306
Q6304
Q6401
Q6402
Q6214
Q6302
Q6303
Q6403
Q6301
Q6205
Q6202
IC6202
Q6201
IC6201

4. ADJUSTMENT

4.1 TUNER SECTION

■ FM Tuner Section

- Set the mode selector to FM BAND.
- Connect the wiring as shown in Fig. 1–1.

Step No.	Adjustment Title	FM SG (1kHz, ±75kHz dev.)		Reception Frequency Display	Adjustment Location	Specifications
		Frequency (MHz)	Level (dBμV)			
1	Front End Sensitivity	98	0-30	98MHz	L6402 T6401	Adjust so that the DC voltage between the IC6201-Pin 20 becomes at maximum level.
2	TUNED IND. Lighting Level	98	18±2	98MHz	VR6201	Adjust so that the indicator of TUNED IND. starts to light up.

Notes:

- *Before adjusting, make sure there is no gap between L6401 and L6402. If there is a gap between them, bring them into contact with each other first, and then make adjustments.*

■ AM Tuner Section

- Set the mode selector to AM BAND.
- Connect the wiring as shown in Fig. 1–1.

Step No.	Adjustment Title	AM SG (400Hz, 30% Mod.)		Reception Frequency Display	Adjustment Location	Specifications
		Frequency (kHz)	Level (dBμV/m)			
1	AM Front and Sensitivity Adjustment	999^{*1}	35–45	999kHz	T6201	Adjust so that the DC voltage between the IC6201-Pin 20 becomes at maximum level.

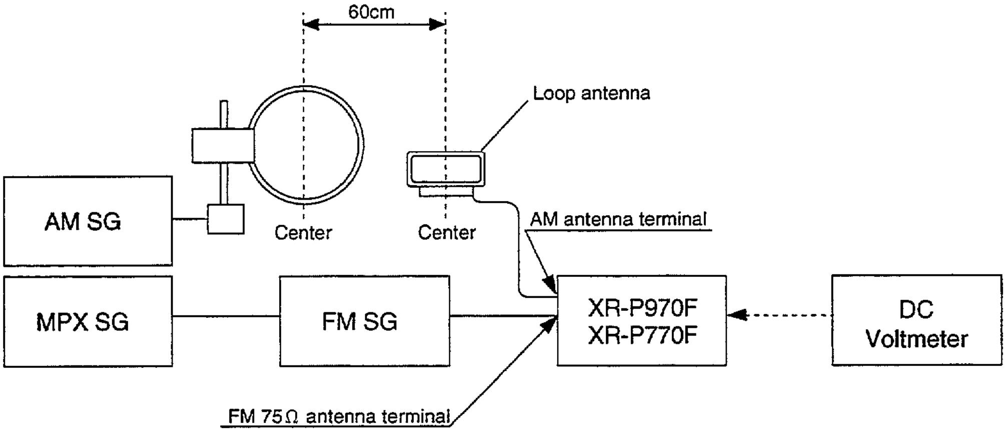

60cm
Loop antenna
AM SG
Center
Center
AM antenna terminal
MPX SG
FM SG
XR-P970F
XR-P770F
DC
Voltmeter
FM 75Ω antenna terminal

Fig. 1–1 AM and FM Adjustment Wiring Diagram

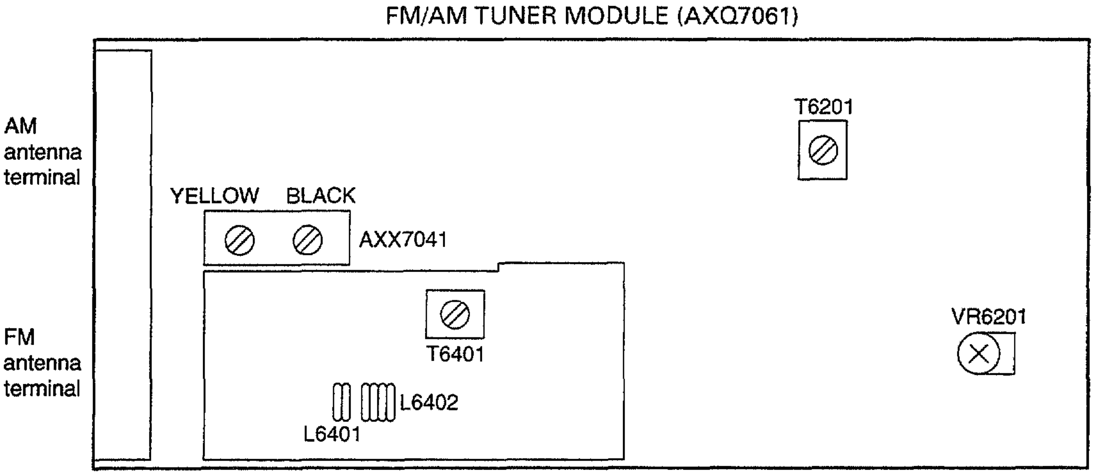
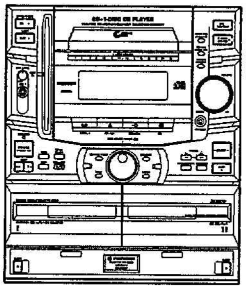

FM/AM TUNER MODULE (AXQ7061)
AM antenna terminal
FM antenna terminal
YELLOW
BLACK
AXX7041
T6201
T6401
L6402
L6401
VR6201

Fig. 1–2 Adjustment Points

Service Manual

PIONEER
The Art of Entertainment



ORDER NO.
RRV1685

STEREO FILE-TYPE CD CASSETTEDECK RECEIVER

XR-P970F

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model	Power Requirement	Remarks
	XR-P970F		
YPW	O	AC240V	—

- **For the circuit and mechanism descriptions, refer to the service manual RRV1430 for XR-P760F.**

CONTENTS

1. SAFETY INFORMATION 2
2. DISASSEMBLY 4
3. EXPLODED VIEWS, PACKING AND PARTS LIST 8
4. BLOCK DIAGRAM 23
5. SCHEMATIC AND PCB CONNECTION DIAGRAMS 25
6. PCB PARTS LIST 57
7. ADJUSTMENTS 64
8. IC INFORMATION 74
9. FL INFORMATION 78
10. PANEL FACILITIES 80
11. SPECIFICATIONS 82

PIONEER ELECTRONIC CORPORATION 4-1, Meguro 1-Chome, Meguro-ku, Tokyo 153, Japan
PIONEER ELECTRONICS SERVICE, INC. P.O. Box 1760, Long Beach, CA 90801-1760, U. S. A.
PIONEER ELECTRONIC (EUROPE) N.V. Haven 1087 Keetberglaan 1, 9120 Melsele, Belgium
PIONEER ELECTRONICS ASIACENTRE PTE. LTD. 501 Orchard Road, #10-00 Lane Crawford Place, Singapore 0923

© PIONEER ELECTRONIC CORPORATION 1996

T-SSY SEPT. 1996 Printed in Japan

1. SAFETY INFORMATION

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual. Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING
Lead in solder used in this product is listed by the California Health and Welfare agency as a known reproductive toxicant which may cause birth defects or other reproductive harm (California Health & Safety Code, Section 25249.5).
When servicing or handling circuit boards and other components which contain lead in solder, avoid unprotected skin contact with the solder. Also, when soldering do not inhale any smoke or fumes produced.

NOTICE
(FOR CANADIAN MODEL ONLY)
Fuse symbols ─▮══╪─ (fast operating fuse) and/or ─▮══⊠─ (slow operating fuse) on PCB indicate that replacement parts must be of identical designation.

REMARQUE
(POUR MODÈLE CANADIEN SEULEMENT)
Les symboles de fusible ─▮══╪─ (fusible de type rapide) et/ou ─▮══⊠─ (fusible de type lent) sur CCI indiquent que les pièces de remplacement doivent avoir la même désignation.

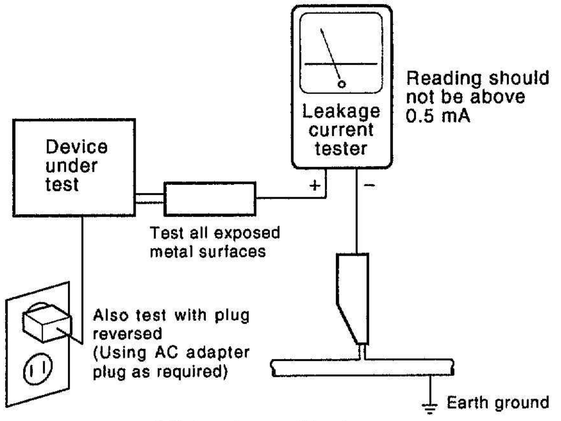
(FOR USA MODEL ONLY)

1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60 Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5 mA.


Reading should not be above 0.5 mA
Leakage current tester
Device under test
+
−
Test all exposed metal surfaces
Also test with plug reversed (Using AC adapter plug as required)
Earth ground

AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage , etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with a ⚠ on the schematics and on the parts list in this Service Manual.
The use of a substitute replacement component which dose not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

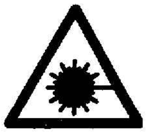
Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

(FOR EUROPEAN MODEL ONLY)

VARO !
AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.

ADVERSEL:
USYNLIG LASERSTRÅLING VED ÅBNING NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION UNDGÅ UDSAETTELSE FOR STRÅLING.

VARNING !
OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD OCH SPÄRREN ÄR URKOPPLAD. BETRAKTA EJ STRÅLEN.

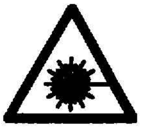


LASER
Kuva 1
Lasersateilyn varoitusmerkki

WARNING !
DEVICE INCLUDES LASER DIODE WHICH EMITS INVISIBLE INFRARED RADIATION WHICH IS DANGEROUS TO EYES. THERE IS A WARNING SIGN ACCORDING TO PICTURE 1 INSIDE THE DEVICE CLOSE TO THE LASER DIODE.

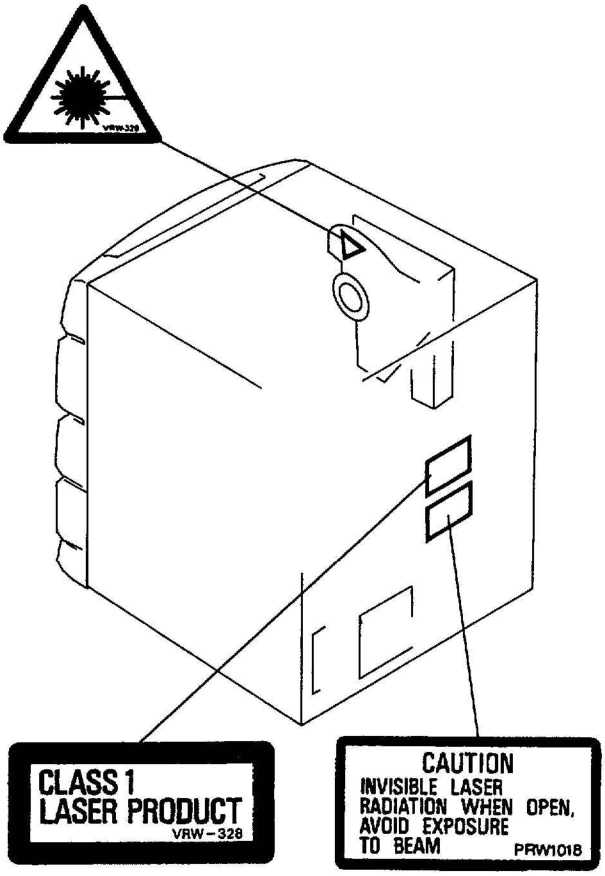
IMPORTANT
THIS PIONEER APPARATUS CONTAINS LASER OF CLASS 1.
SERVICING OPERATION OF THE APPARATUS SHOULD BE DONE BY A SPECIALLY INSTRUCTED PERSON.

LASER DIODE CHARACTERISTICS
MAXIMUM OUTPUT POWER: 5 mw
WAVELENGTH: 780 – 785 nm



LASER
Picture 1
Warning sign for laser radiation

LABEL CHECK



Additional Laser Caution

1. Laser Interlock Mechanism
   The position of the switch (S651) for detecting loading state is detected by the system microprocessor, and the design prevents laser diode oscillation when the switch (S651) is not on $\overline{\text{CLMP}}$ terminal side ($\overline{\text{CLMP}}$ signal is OFF or high level.) Thus, the interlock will no longer function if the switch (S651) is deliberately set to $\overline{\text{CLMP}}$ terminal side. (low level)
   The interlock also does not function in the test mode*.
   Laser diode oscillation will continue, if pin 1 of M51593FP (IC101) on the PRE-AMP BOARD ASSY mounted on the pickup assembly is connected to GND, or pin 19 is connected to low level (ON), or else the terminals of Q101 are shorted to each other (fault condition).
2. When the cover is opened, close viewing of the objective lens with the naked eye will cause exposure to a Class 1 laser beam.

* *Refer to page 70.*

2. DISASSEMBLY (各部のはずしかた)

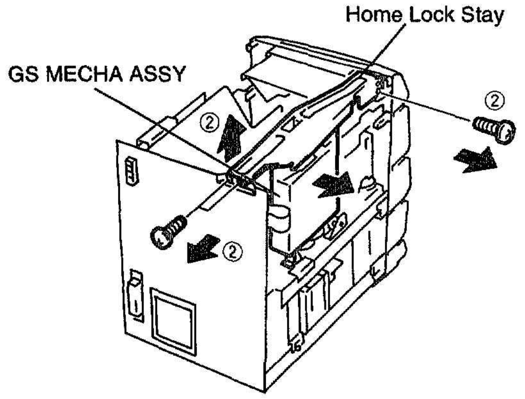
■ REMOVING THE GS MECHA ASSY (GSメカASSYのはずしかた)

NOTE : Before removing the GS Mecha Assy, make sure you turn the power OFF and disconnect the AC power cord.

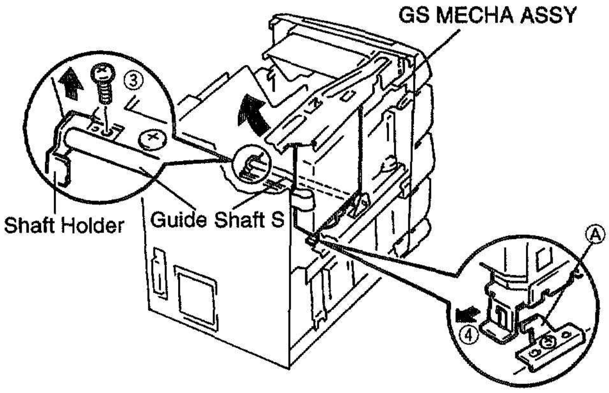
(注意： はずす前に必ず電源を切ってから電源コードを抜いてください。)

① Remove the bonnet. (Since the front of the home lock stay makes contact, hold the bonnet in that place and pull and lift at the same time.)
(ボンネットをはずす。ホームロックステイのフロント側があたるので、その箇所のボンネットを持ち上げながら引く。)

② Move the GS Mecha ASSY to the right (viewed from the rear), watching out for the 2 Lock locations (partⒶ).
(GSメカASSYをロック2ヶ所(Ⓐ部)を解除して、リア側から見て右端に移動する。)



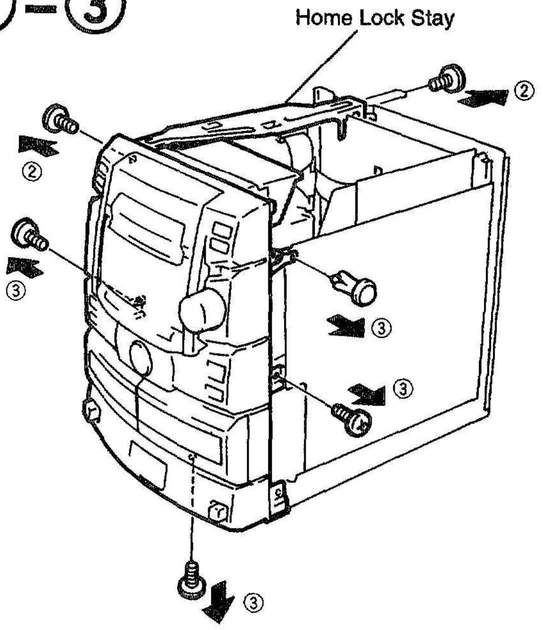
③, ④ Release the shaft holder that fixes guide shaft S in place (screw ③), release the lock location (part Ⓐ) of the GS Mecha ASSY and remove the GS Mecha ASSY together with the guide shaft S.
(ガイドシャフトSを固定しているシャフトフォルダーをはずし(ネジ③)、GSメカAssyのロック(Ⓐ部)を解除して、ガイドシャフトSごとGSメカASSYをはずす。)



■ REMOVING THE FRONT PANEL (フロントパネルのはずしかた)

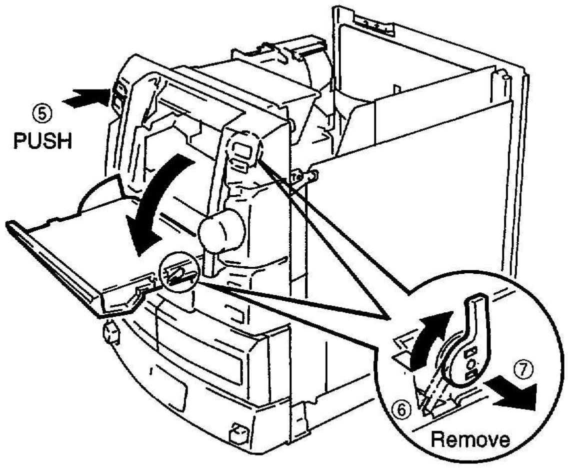
① Remove the bonnet.
(ボンネットをはずす。)

②-③



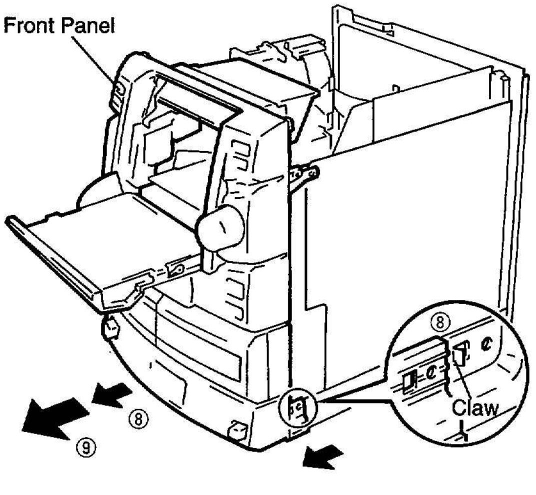
④ Remove the HEADPHONE ASSY wire rod.
(HEADPHONE ASSYの線材はずす。)

⑤-⑦

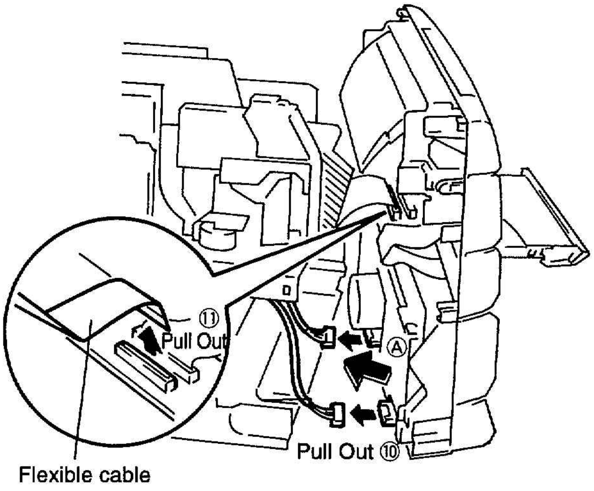

⑤
PUSH
⑥
⑦
Remove

⑧ Shift the front panel slightly toward you, being cautious of the left and right catches on the chassis and sub chassis.
(フロントパネルをシャーシとサブシャーシの左右のツメに注意しながら手前に少しずらす。)

⑨ Pull the front panel further toward you, and remove it from the chassis.
(フロントパネルをさらに手前に引き、シャーシから抜く。)


Front Panel
⑧
⑨
⑧
Claw

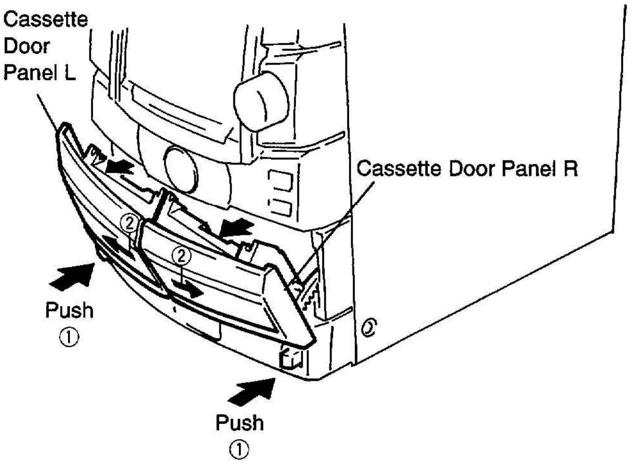
⑩, ⑪


⑪
Pull Out
Ⓐ
Flexible cable
Pull Out ⑩

■ HOW TO REMOVE THE DOOR PANEL
(カセットドアパネルのはずしかた)

① Open the Cassette Door Panel.
(カセットドアパネルをOPENする。)

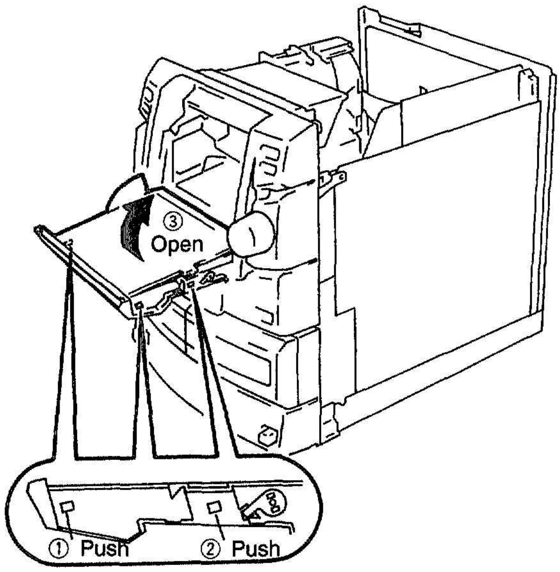
② Slide the Cassette Door Panel, then remove it.
(カセットドアパネルをスライドさせはずす。)


Cassette Door Panel L
Cassette Door Panel R
②
②
Push
①
Push
①

■ MICRO COMPUTER IC REPLACEMENT METHOD

(マイコンICの交換方法)

①,②,③

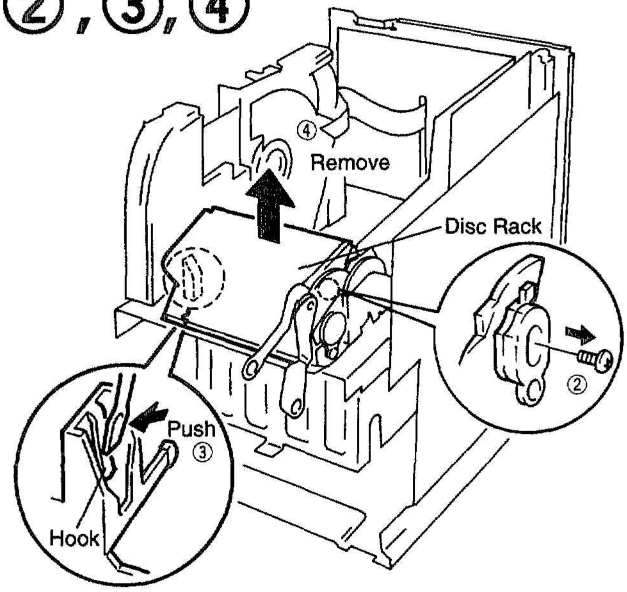

③
Open
① Push
② Push

■ REMOVING THE DISC RACK

(ディスクラックのはずしかた)

① Remove the front panel.
(フロントパネルをはずす。)

②,③,④


④
Remove
Disc Rack
Push
③
Hook
②

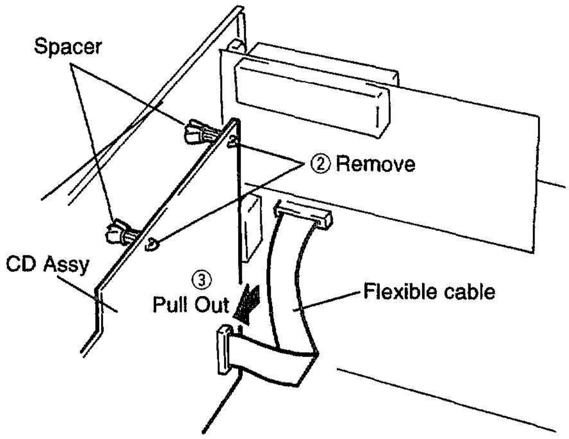
■ REMOVING THE POWER AMP MODULE

(パワーアンプモジュールのはずしかた)

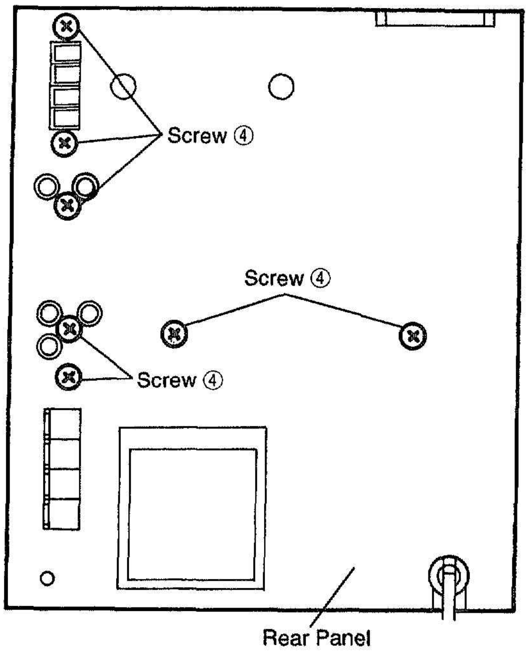
① Remove the bonnet and home lock stay.
(Refer to "■ Removing the Front Panel")
(ボンネットとホームロックステイをはずす。)
(“フロントパネルのはずし方” 参照)

②,③

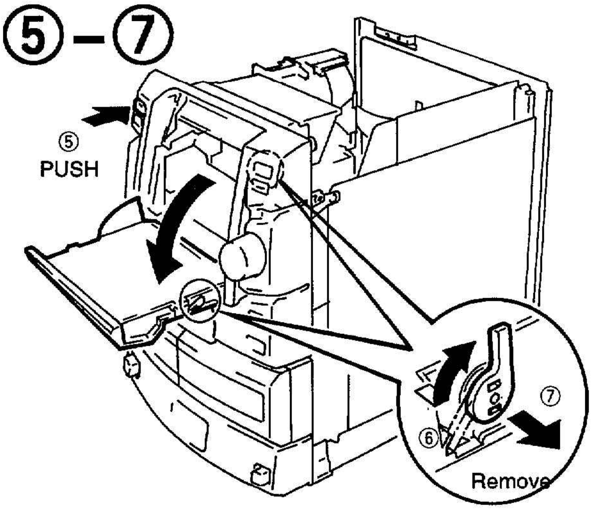
Remove the spacer from the CD ASSY.
(CD ASSYからロッキングカードスペーサをはずす。)


Spacer
② Remove
CD Assy
③
Pull Out
Flexible cable

④ Remove the rear panel (screw ④ x 7).
(リアパネルをはずす。(ネジ④ 7本))

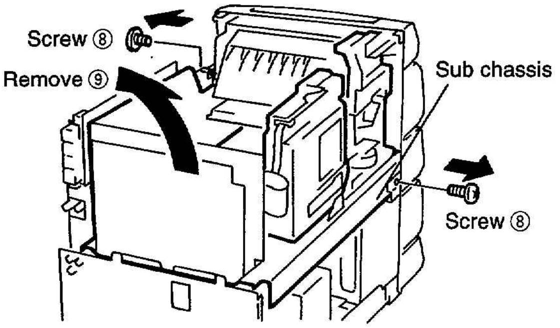

Screw ④
Screw ④
Screw ④
Rear Panel

⑤–⑦

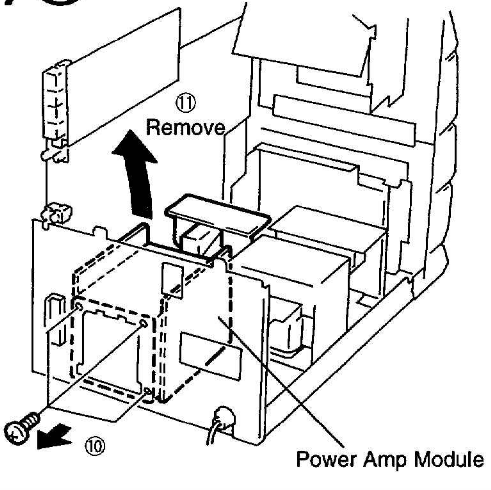

⑤
PUSH
⑦
⑥
Remove

⑧, ⑨

Remove screw ⑧ and remove the sub chassis together with the GS Slot-In Mecha ASSY and the GS Mecha ASSY.
(ネジ⑧をはずしてGSスロットインメカ、GSメカごとサブシャーシをはずす。)

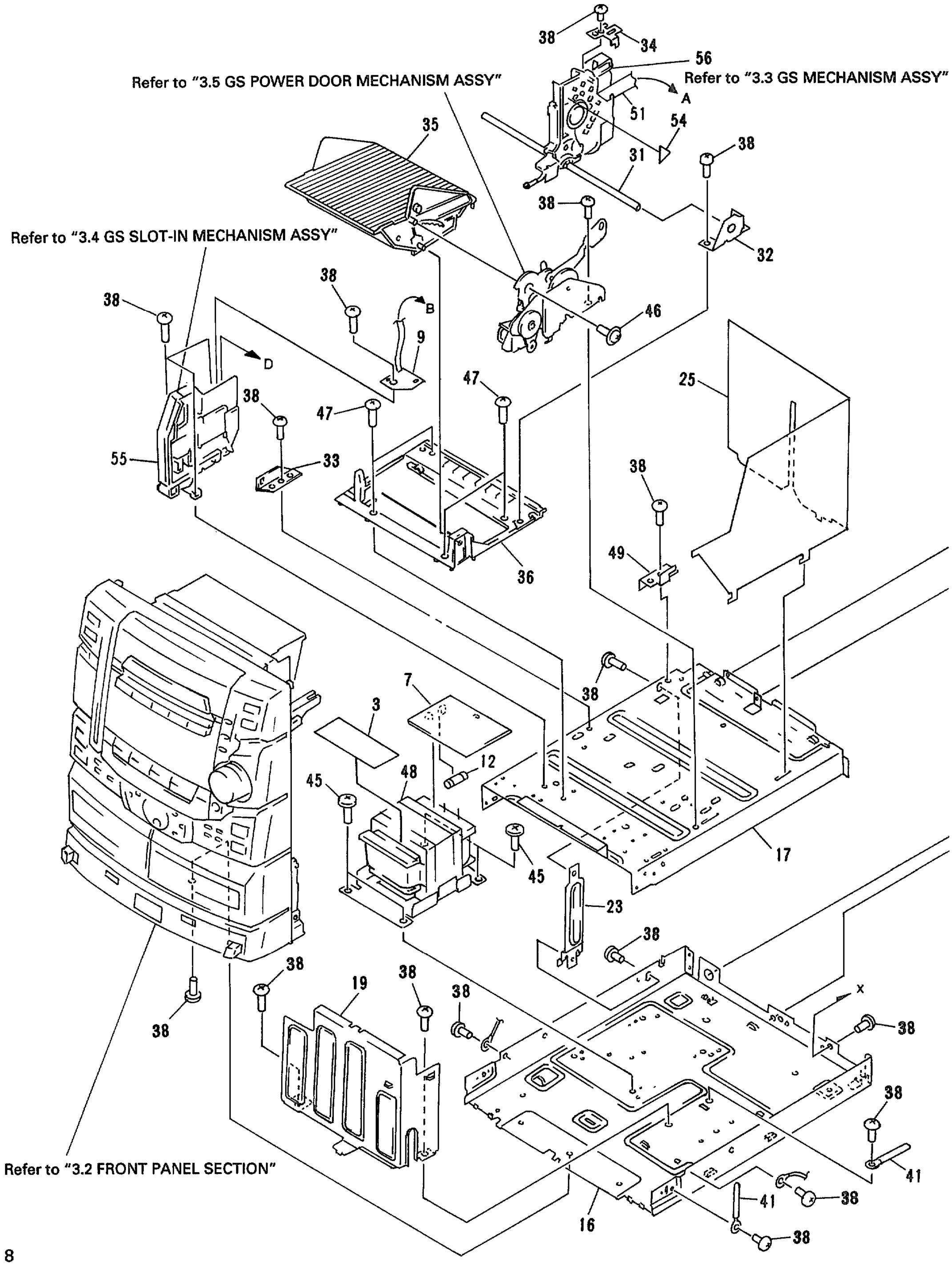

Screw ⑧
Remove ⑨
Sub chassis
Screw ⑧

⑩, ⑪


⑪
Remove
⑩
Power Amp Module

3. EXPLODED VIEWS AND PARTS LIST

3.1 EXTERIOR


Refer to "3.5 GS POWER DOOR MECHANISM ASSY"

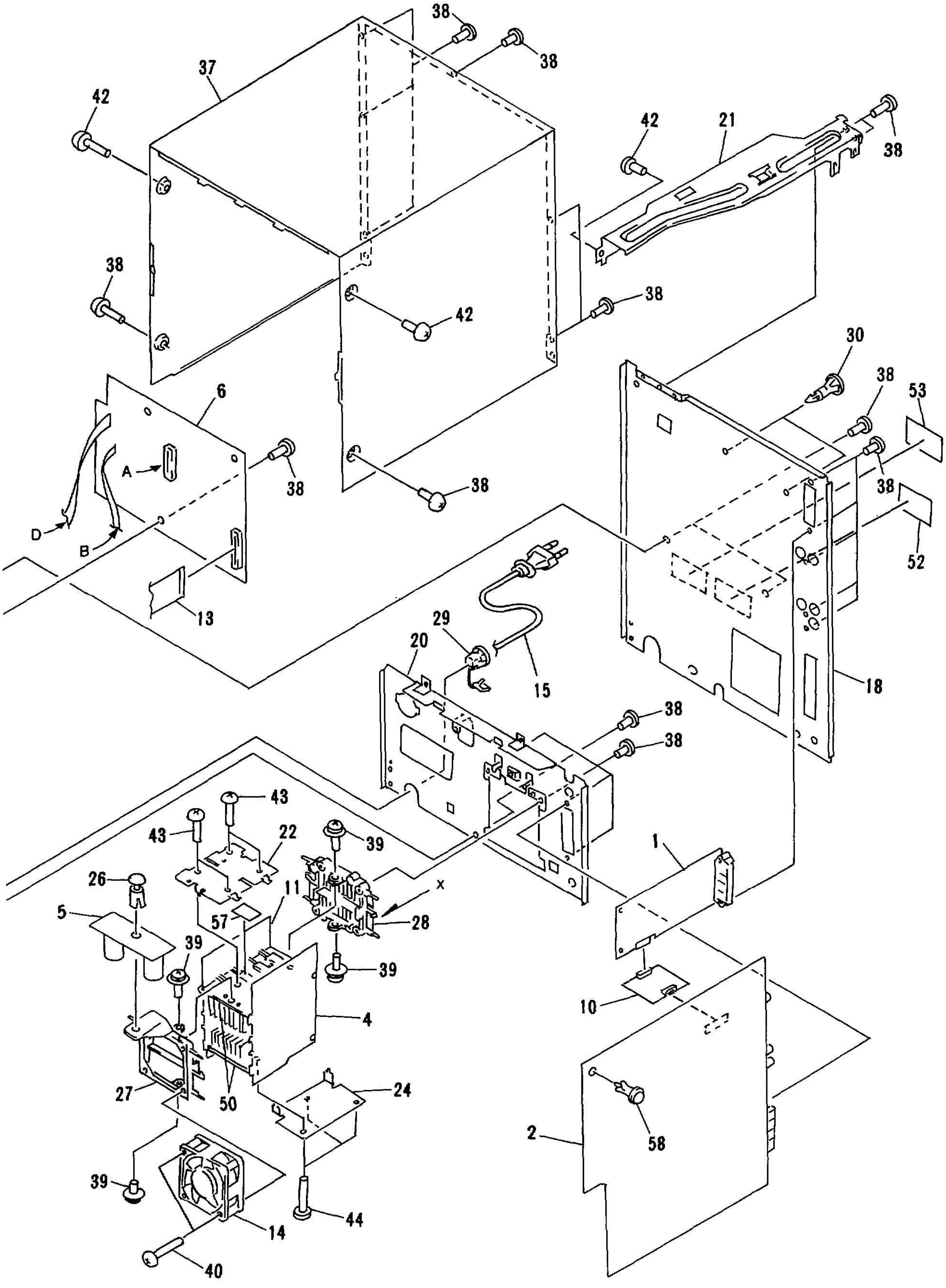
Refer to "3.3 GS MECHANISM ASSY"

Refer to "3.4 GS SLOT-IN MECHANISM ASSY"

Refer to "3.2 FRONT PANEL SECTION"

38
34
56
A
51
54
35
31
38
38
32
38
38
B
9
46
D
47
25
38
47
55
33
38
36
49
7
38
3
12
45
48
17
45
23
38
38
19
38
38
X
38
38
38
41
41
38
16
38

NOTE: Screws adjacent to ▼ mark on the product are used for disassembly.


38
38
37
42
42
21
38
38
38
42
30
38
53
6
A
38
38
38
D
B
52
13
29
20
15
18
38
38
43
43
22
39
1
26
11
X
5
57
28
39
39
4
10
27
50
24
2
58
39
44
14
40

NOTES:
- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.*

EXTERIOR

Parts List

Mark	No.	Description	Parts No.
	1	FM/AM Tuner Module	AXQ7051
	2	AF Assy	AWZ8696
	3	Secondary Assy	AWZ8758
	4	Front AMP Assy	AWZ8698
	5	G.C Assy	AWZ8565
	6	CD Assy	AWZ8751
	7	Primary Assy	AWZ8705
	8	....	
NSP	9	Home SW Assy	AWZ8575
	10	TX Connect Assy	AWZ8591
	11	Rear-Amp Reg Assy	AWZ8699
⚠	12	Fuse (FU1: T1.6A)	AEK1056
	13	35P F•F•C/30V	ADD7045
	14	DC Fan Motor	AXM7003
⚠	15	AC Power Cord	ADG1123
NSP	16	Chassis (MTL)	ANA7053
NSP	17	Subschssis	ANA7054
	18	Rear Panel	ANC7507
	19	Front Stay (MTL)	AND7006
	20	Rear Stay (MTL)	AND7007
	21	Home Lock (MTL)	AND7022
	22	Bracket	ANG1868
	23	Side Angle (MTL)	ANG7091
	24	Power Pac Holder	ANG7109
	25	CD Cover (PVC)	AAK7333
	26	Push Rivet (MOD)	AEC7068
	27	Mold A	AMR2594
	28	Mold B	AMR2595
	29	Strain Relief	CM-22B
NSP	30	Locking Cade Spacer	VEC1596
	31	Guide Shaft S	ALA7008
	32	Shaft Holder	ANB7021
	33	Shaft Holder S	ANB7024
	34	Assist Angle 2	ANB7065
	35	Disk Rack	ANW7069
	36	Rackbase SP	ANW7109
	37	Bonnet Case	ANE7142
	38	Screw	BBZ30P080FZK
	39	Screw	ABA1021
	40	Screw	BPZ30P350FZK
NSP	41	Clamper	RNE1277
	42	Screw	VPZ30P120FZK
	43	Screw	BBZ30P140FZK
	44	Screw	BBZ30P180FMC
	45	Screw	BBZ40P080FZK
	46	Screw	IPZ30P080FMC
	47	Screw C	PBA1106
⚠	48	Power Transformer	ATS7148
	49	Lock Angle 2 (MTL)	ANG7117
	50	Heat Sink	ANH7007
	51	22P F•F•C/30V	ADD7016
	52	Caution Label	PRW1018
NSP	53	Label (Paper)	VRW-328
	54	Caution Label (G)	VRW-329
NSP	55	GS Slot-In Mechanism Assy	AXA7044
NSP	56	GS Mechanism Assy	AXA7047
	57	Sheet	AEE1014
	58	Push Rivet	AEC7069

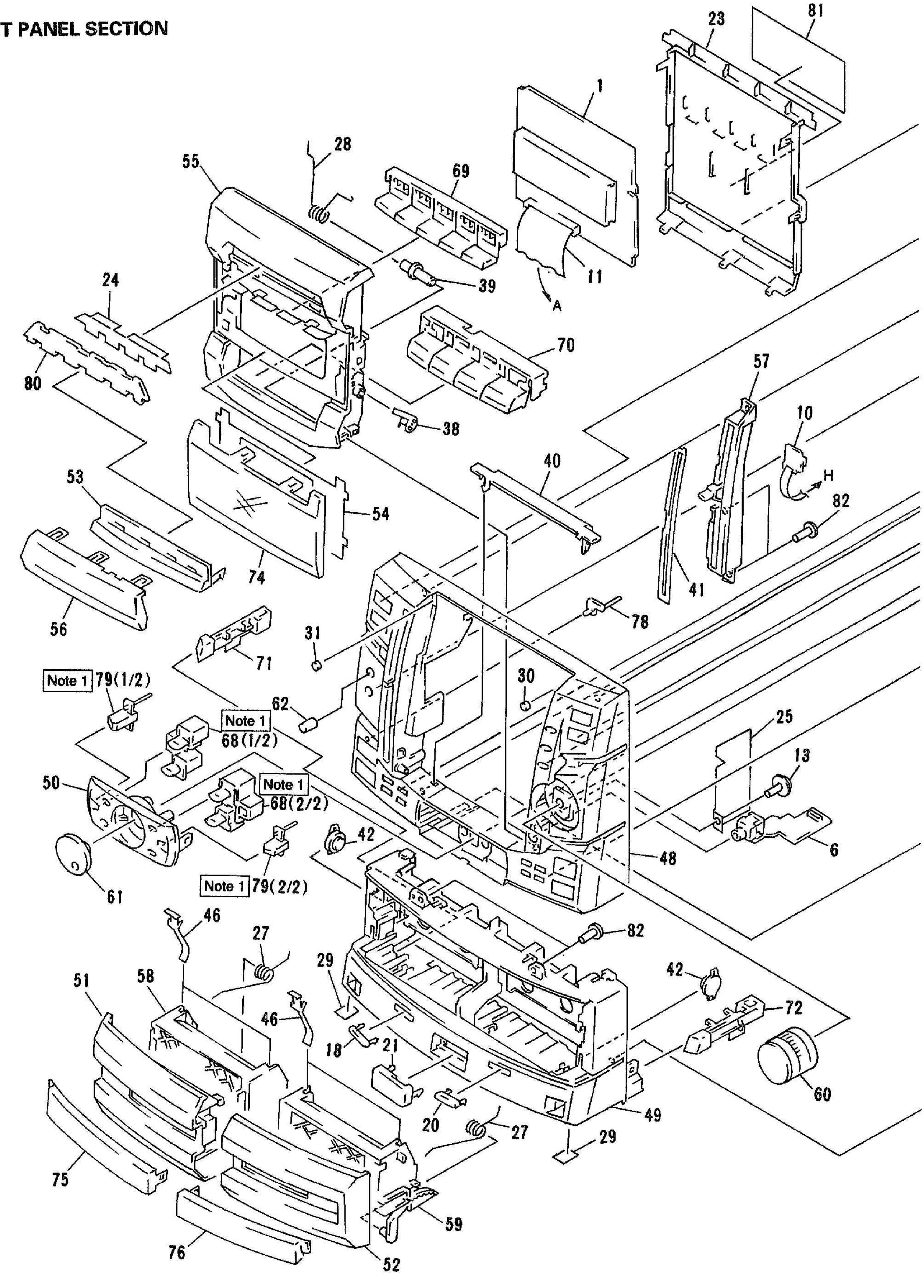
3.2 FRONT PANEL SECTION

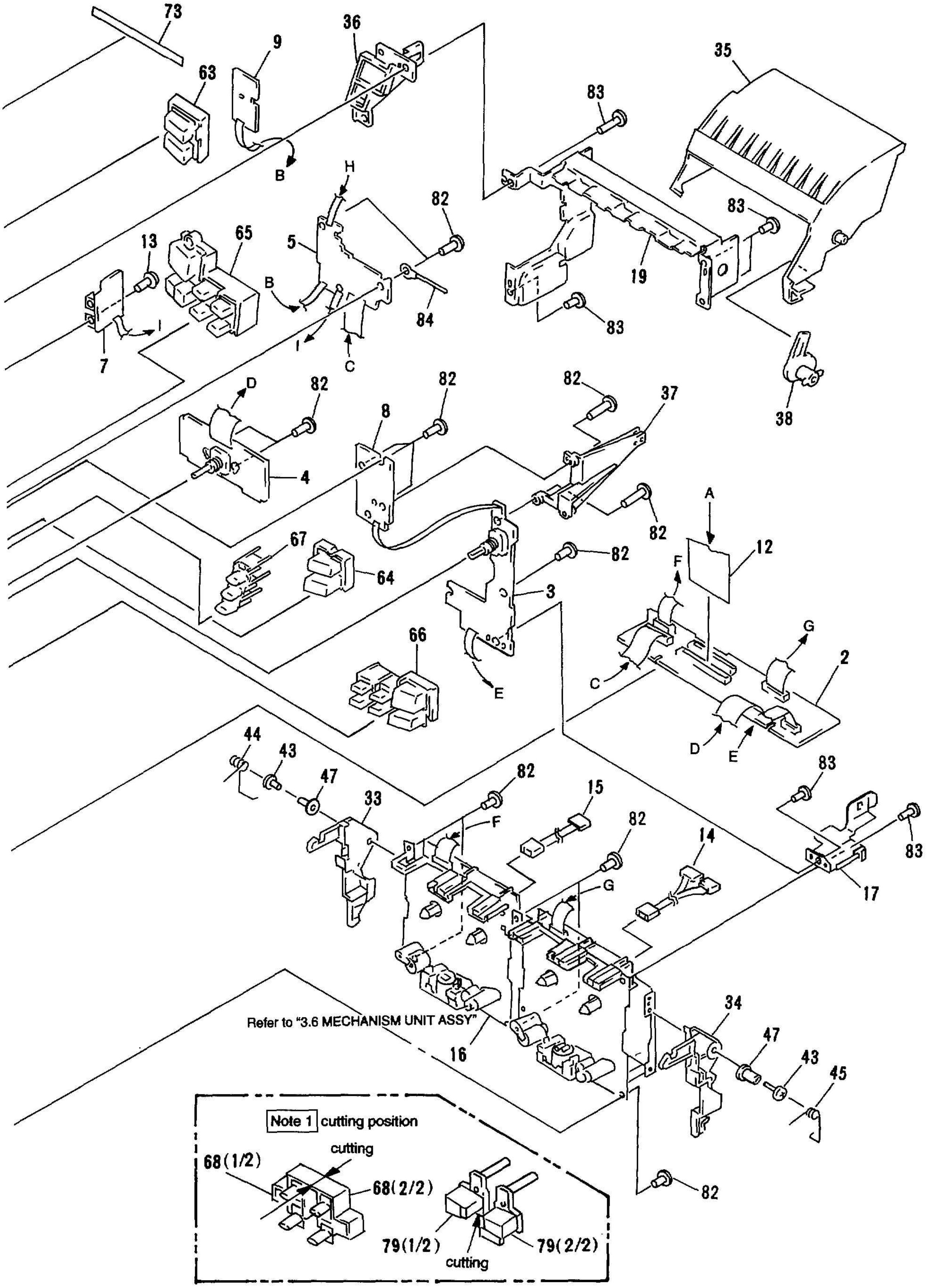
Parts List

Mark	No.	Description	Parts No.
	1	CD Door Assy	AWZ8700
	2	Ope. Center Assy	AWZ8567
	3	Ope. Right Assy	AWZ8568
	4	Jog Assy	AWZ8702
	5	Ope. Left Assy	AWZ8570
	6	Headphone Assy	AWZ8703
	7	Mic Assy	AWZ8714
NSP	8	SW1 Assy	AWZ8579
	9	SW2 Assy	AWZ8581
NSP	10	LED Assy	AWZ8582
	11	39P F•F•C/60V	ADD7043
	12	35P F•F•C/60V	ADD7044
	13	Screw With Washer	ABA1005
	14	Connector Assy 5P	RKP1582
	15	Connector Assy 3P	RKP1583
	16	Meshanism Unit	RYM1248
	17	Earth Plate	ANG7110
	18	Azimuth Cover L	AZA7214
	19	Subpanel (MTL)	ANG7113
	20	Azimuth Cover R	AZA7215
	21	Name Plate	AAK7335
	22	....	
	23	CD Door Cover (PLS)	AAK7318
	24	Edge Light Sheet	AAK7373
	25	Link Sheet (PVC)	AAK7386
	26	....	
	27	Deck Door Spring	ABH7134
	28	CD Door Sping	ABH7143
	29	Rubber Sheet	AEB1111
	30	Rubber Sheet	AEB7054
	31	Cussion Rubber	AEB7068
	32	....	
	33	Eject ARM (L)	AMR7020
	34	Eject ARM (R)	AMR7021
	35	Barrier (PLS)	AMR7135
	36	PCB Holder	AMR7140
	37	AF PCB Holder	AMR7141
	38	Link Holder (PLS)	AMR7142
	39	Shaft Mold (PLS)	AMR7143
	40	FFC Holder	AMR7159
	41	Slot Sheet	AWL7022
	42	Damper Assy	AXA7021
	43	Screw	BSZ20P120FMC
	44	Spring (L)	RBH1411
	45	Spring (R)	RBH1412
	46	Spring (Stainless)	RBK1004
	47	Corrar	RNK2135
	48	Front Panel A	AZA7207
	49	Front Panel B	AZA7209
	50	Jog Panel A	AZA7210

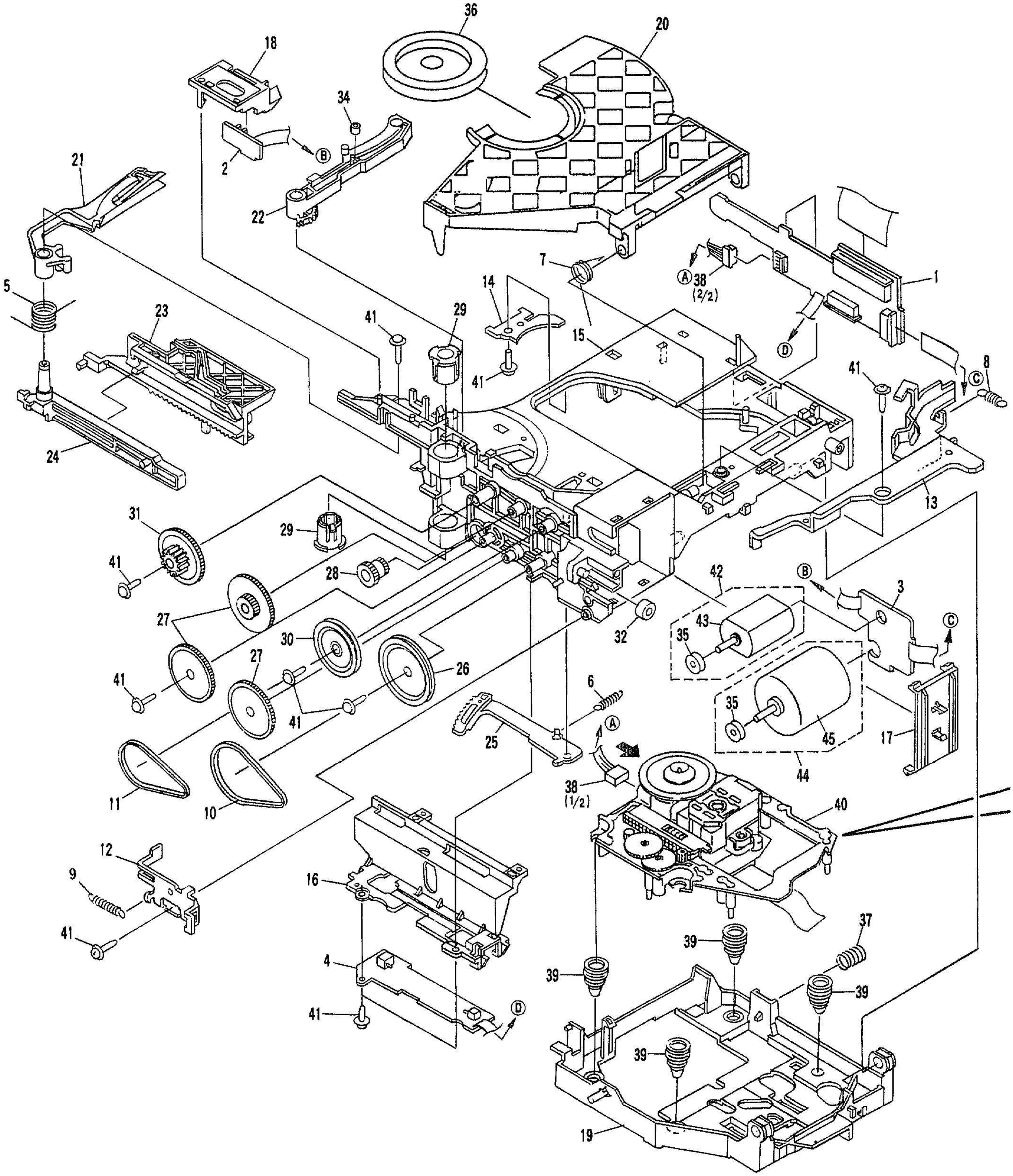
Mark	No.	Description	Parts No.
	51	Cassette door Panel L	AZA7212
	52	Cassette door Panel R	AZA7213
	53	Genru Panel (PLS)	AAK7315
	54	Amp Window Sheet	AAK7362
	55	CD Door (PLS)	AAN7155
	56	Edge Light Cover (PLS)	AMR7136
	57	Slot Sheet Mold	AMR7139
	58	Door Pocket L	AAN7158
	59	Door Pocket R	AAN7159
	60	Vol Knob (PLS)	AAB7111
	61	Jog Knob (PLS)	AAB7112
	62	Mic Volume Knob	AAB7118
	63	Slot Eject Button	AAD7337
	64	SFC Button	AAD7338
	65	Power Button	AAD7339
	66	Play Button	AAD7340
	67	Timer Button	AAD7341
	68	Name Button	AAD7342
	69	Genru Button (PLS)	AAD7343
	70	Function Button (PLS)	AAD7366
	71	Eject Button L	AAD7345
	72	Eject Button R	AAD7346
	73	Disc Rack Panel (PVC)	AAK7251
	74	Amp Window (PLS)	AAK7341
	75	Door Window L	AAK7307
	76	Door Window R	AAK7308
	77	....	
	78	Standby Lenz	AAK7310
	79	Jog Lenz	AAK7311
	80	Edge Light Lenz (PLS)	AAK7314
	81	Caution Label	ARW7024
	82	Screw	BPZ30P080FMC
	83	Screw	VPZ30P120FZK
	84	Binder	RNE1277

FRONT PANEL SECTION

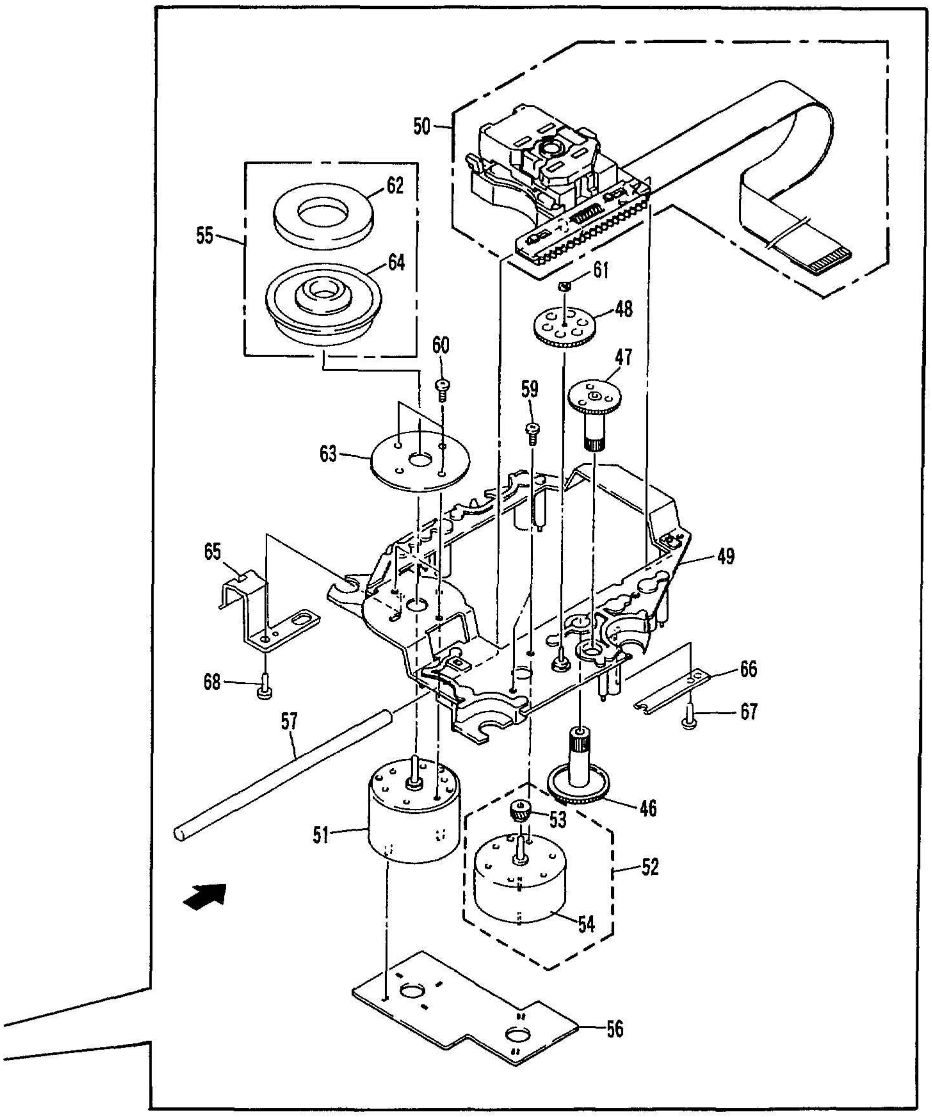

23
81
1
28
55
69
39
11
A
24
70
80
57
10
38
40
H
82
53
54
74
41
56
78
31
71
Note 1
79(1/2)
30
62
Note 1
68(1/2)
25
13
50
Note 1
68(2/2)
42
6
48
Note 1
79(2/2)
61
46
27
82
29
42
51
58
72
46
18
21
60
20
27
49
29
75
59
76
52


B
H
B
I
I
C
D
A
F
G
C
E
D
E
F
G
Refer to "3.6 MECHANISM UNIT ASSY"
Note 1 cutting position
cutting
68(1/2)
68(2/2)
79(1/2)
79(2/2)
cutting

3.3 GS MECHANISM ASSY


36
20
18
34
2
Ⓑ
21
22
7
Ⓐ
38
(2/2)
1
5
14
23
41
29
15
41
Ⓓ
41
8
Ⓒ
24
13
31
29
41
28
42
Ⓑ
3
43
27
32
35
Ⓒ
30
26
41
27
6
35
41
Ⓐ
45
17
25
44
11
10
38
(1/2)
40
12
9
16
41
37
39
39
39
4
41
Ⓓ
39
19

Servo Mechanism Assy GM

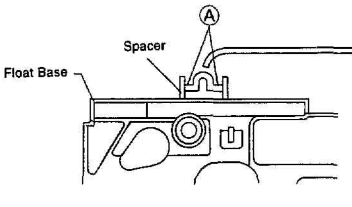

50
62
55
64
61
48
60
47
59
63
49
65
66
68
67
57
46
53
51
52
54
56

- How to install the disc table

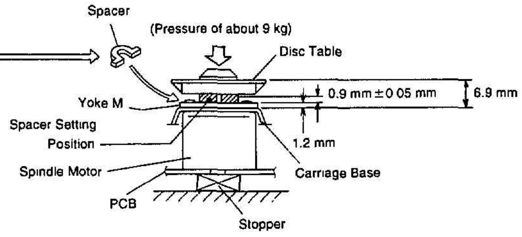
1 Use nipper or other tool to cut the two sections marked Ⓐ figure 1.
Then remove the spacer.

2 While supporting the spindle motor shaft with the stopper, put spacer on top of the yoke M, and stick the disc table on top (takes about 9kg pressure). Take off the spacer.

1


Ⓐ
Spacer
Float Base

2

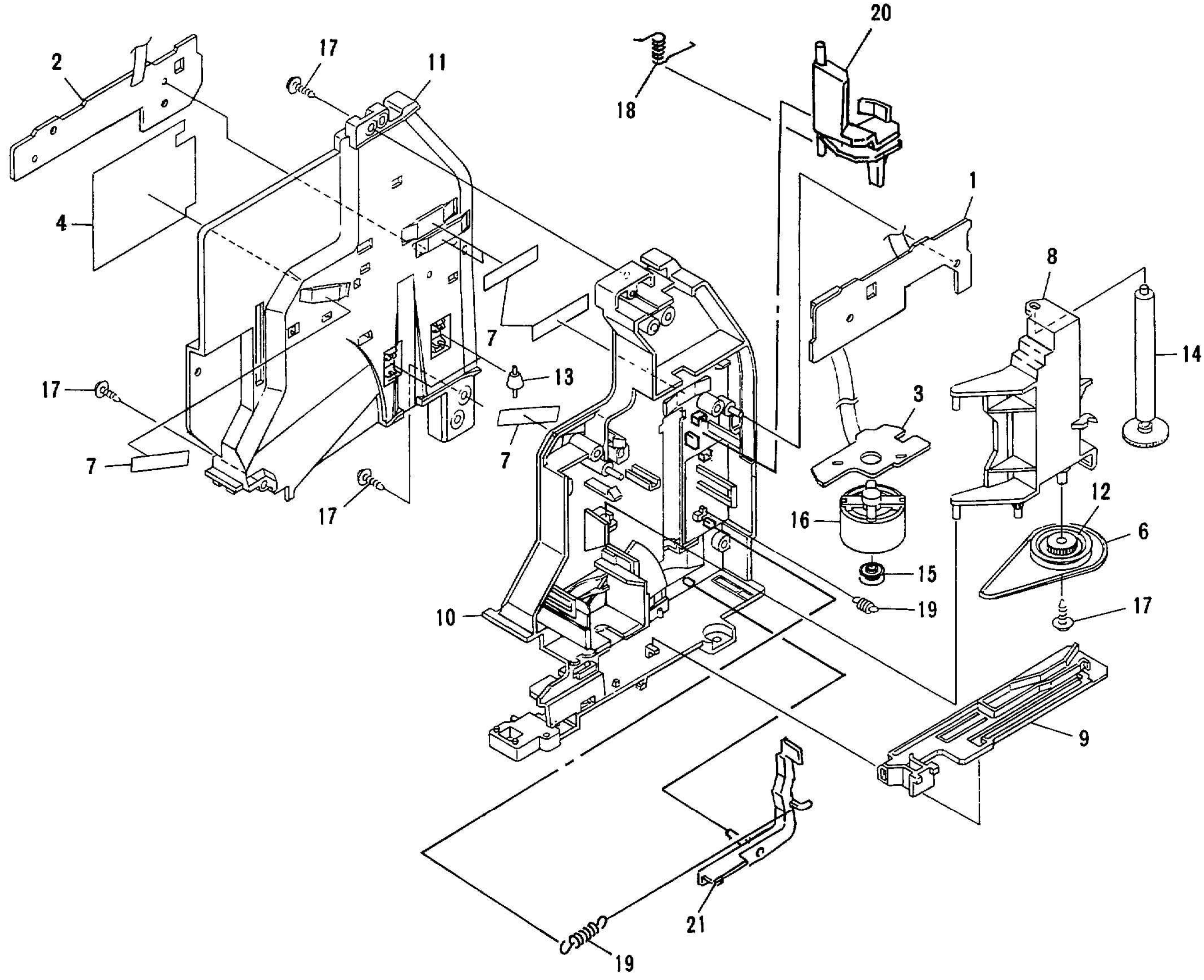

Spacer
(Pressure of about 9 kg)
Disc Table
0.9 mm ± 0.05 mm
6.9 mm
Yoke M
Spacer Setting Position
1.2 mm
Spindle Motor
Carriage Base
PCB
Stopper

GS MECHANISM ASSY

Parts List

Mark	No.	Description	Parts No.
NSP	1	MECHA PCB ASSY	AWZ8802
NSP	2	SENSOR PCB ASSY	AWZ7836
NSP	3	MOTOR PCB ASSY	AWZ7837
NSP	4	SW PCB ASSY	AWZ7838
	5	ARM A SPRING 2	ABH7124
	6	GEAR PLATE SPRING	ABH7051
	7	CLAMP SPRING	ABH7107
	8	LOCK LEVER SPRING B	ABH7142
	9	LOCK ANGLE SPRING 2	ABH7123
	10	LOADING BELT	AEB7029
	11	BELT	AEB7030
NSP	12	LOCK ANGLE	ANB7027
NSP	13	LOCK LEVER	ANB7038
NSP	14	SERVO STOPPER S	ANB7047
	15	LOADING BASE	ANW7086
	16	CAM COVER	ANW7052
	17	MOTOR HOLDER	ANW7053
	18	SENSOR HOLDER	ANW7054
	19	FLOAT BASE	ANW7080
	20	CLAMPER HOLDER	ANW7084
	21	ARM (A)	ANW7057
	22	ARM (B)	ANW7058
	23	DRIVE PLATE	ANW7059
	24	ARM PLATE	ANW7060
	25	GEAR PLATE	ANW7082
	26	GEAR PULLEY (B)	ANW7062
	27	GEAR A	ANW7063
	28	DRIVE GEAR	ANW7064
	29	BEARING	ANW7065
	30	GEAR PULLEY A	ANW7066
	31	SELECT GEAR	ANW7067
	32	ROLLER	ANW7068
	33	....	
	34	ROLLER B	ANW7075
	35	MOTOR PULLEY	PNW1634
	36	CLAMPER	PNW2692
	37	FLOAT SPRING	ABH7049
	38	CONNECTOR ASSY (4P)	ADE7006
	39	FLOAT RUBBER	AEB7028
NSP	40	SERVO MECHANISM ASSY GM	AXA7028
	41	SCREW	IPZ20P080FMC
	42	MOTOR ASSY (SELECT)	AEA7005
NSP	43	MOTOR	PXM1002
	44	MOTOR ASSY	AEA7006
	45	LOADING MOTOR	VXM1034
	46	GEAR 1	PNW2052
	47	GEAR 2	PNW2053
	48	GEAR 3	PNW2054
	49	CARRIAGE BASE	PNW2699
	50	PICKUP ASSY	AEA7004
	51	D.C. MOTOR ASSY (SPDL)	PEA1235
	52	CARRIAGE DC MOTOR ASSY	PEA1246
	53	PINION GEAR	PNW2055
NSP	54	CARRIAGE DC MOTOR/0.3W	PXM1027
	55	DISC TABLE ASSY	PEA1314
	56	MECHANISM BOARD ASSY	PWX1192
	57	GUIDE BAR	PLA1094
	58	....	
	59	SCREW	JFZ17P025FZK
	60	SCREW	JFZ20P040FMC
	61	WASHER	WT12D032D025
	62	CLAMP MAGNET	PMF1014
	63	YOKE M	PNB1312
NSP	64	DISC TABLE	PNW2410
NSP	65	FLOAT ANGLE	ANB7020
	66	GEAR STOPPER	PNB1303
	67	SCREW	BPZ20P060FMC
	68	SCREW	BPZ26P100FMC
		FROIL (for service)	GYA1001
		HA NARL (for service)	GEM1016

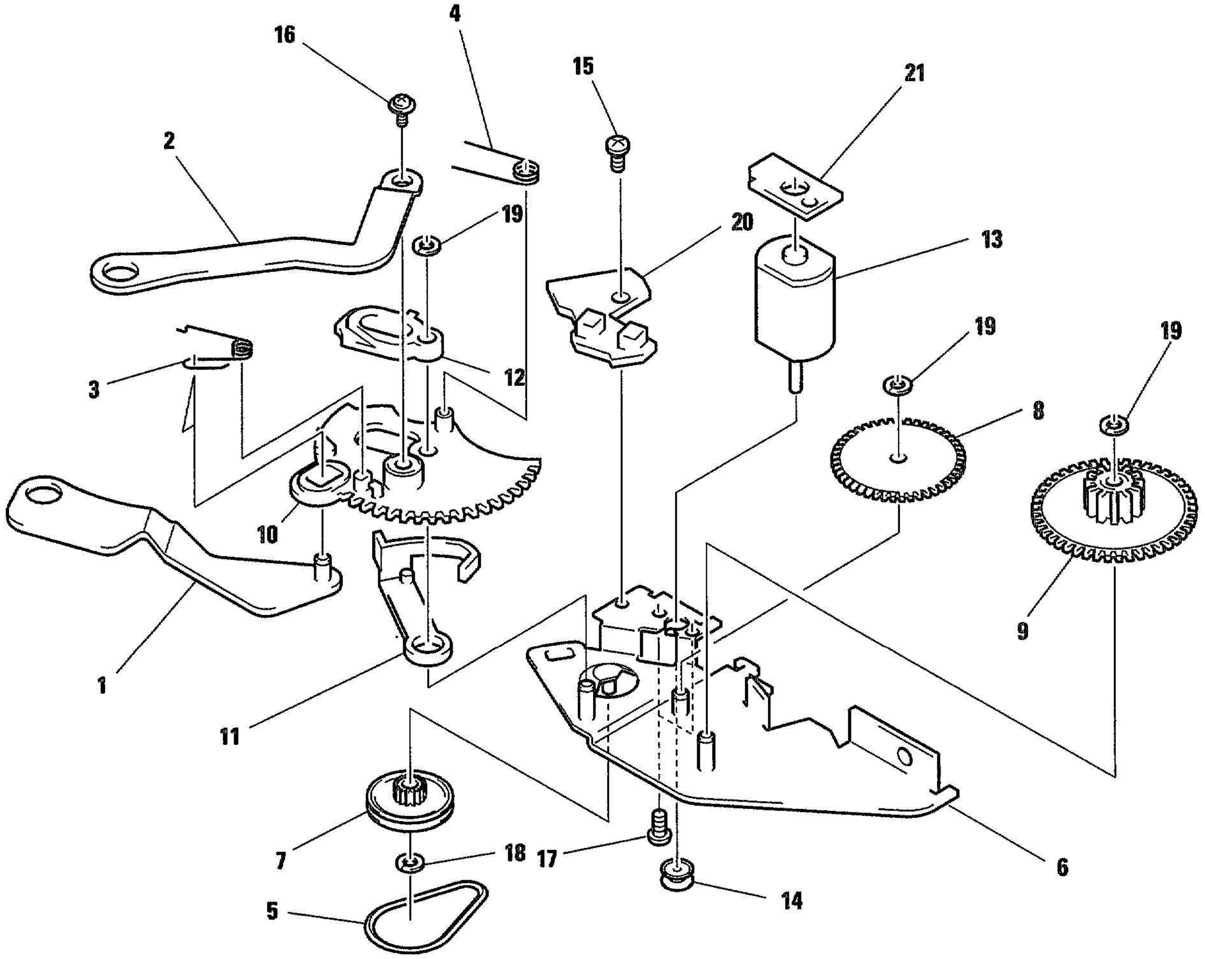
3.4 GS SLOT-IN MECHANISM ASSY



Parts List

Mark	No.	Description	Parts No.
NSP	1	Sensor Board Assy	AWZ8560
NSP	2	LED Board Assy	AWZ8561
NSP	3	Motor Board Assy	AWZ8744
	4	Blind	AAK7219
	5	....	
	6	Belt	AEB7033
	7	Ecsaine	AED7004
	8	Gear Holder	ANW7110
	9	Slide Plate	ANW7048
	10	Case (M)	ANW7101
	11	Case (S)	ANW7102
	12	Gear Pulley A	ANW7066
	13	Guide Roller	ANW7076
	14	Roller Assy	AXA7029
	15	Motor Pulley	PNW1634
	16	DC Motor/0.75W	PXM1010
	17	Screw	IPZ20P080FMC
	18	Shutter Spring	ABH7136
	19	P.B Spring	ABH7137
	20	Shutter	ANW7099
	21	Lever	ANW7100

3.5 GS POWER DOOR MECHANISM ASSY



Parts List

Mark	No.	Description	Parts No.
	1	Link A (MTL)	ANG7111
	2	Link B (MTL)	ANG7115
	3	Door Spring	ABH7144
	4	Rack Spring	ABH7145
	5	Door Belt	AEB7067
	6	Base Plate (SECC)	ANB7081
	7	Gear Pulley (POM)	ANW7103
	8	Gear B (POM)	ANW7104
	9	Gear A (POM)	ANW7105
	10	Drive Gear (ABS)	ANW7106
	11	SW Lever (ABS)	ANW7107
	12	Push Plate (ABS)	ANW7108
NSP	13	Motor	AXM7010
	14	Motor Pulley (POM)	PNW1634
	15	Screw	BBZ20P060FMC
	16	Screw	IPZ20P080FMC
	17	Screw	PMA20P030FMC
	18	Washer	WT26D060D025
	19	Washer	WT36D072D025
NSP	20	CD Door SW Assy	AWZ8576
NSP	21	CD Door Motor Assy	AWZ8577

3.6 MECHANISM UNIT

Parts list

■ Mechanism unit I and II (1/2)

Mark	No.	Description	Parts No.
	1	ASSY MOTOR	RXM1080
NSP	2	JUMPER WIRE	RDD1012
	3	BRACKET MOTOR	RNE1830
	4	SPACER	RNK1822
	5	SCREW	RBA1100
	6	SCREW	PCZ20P040FMC

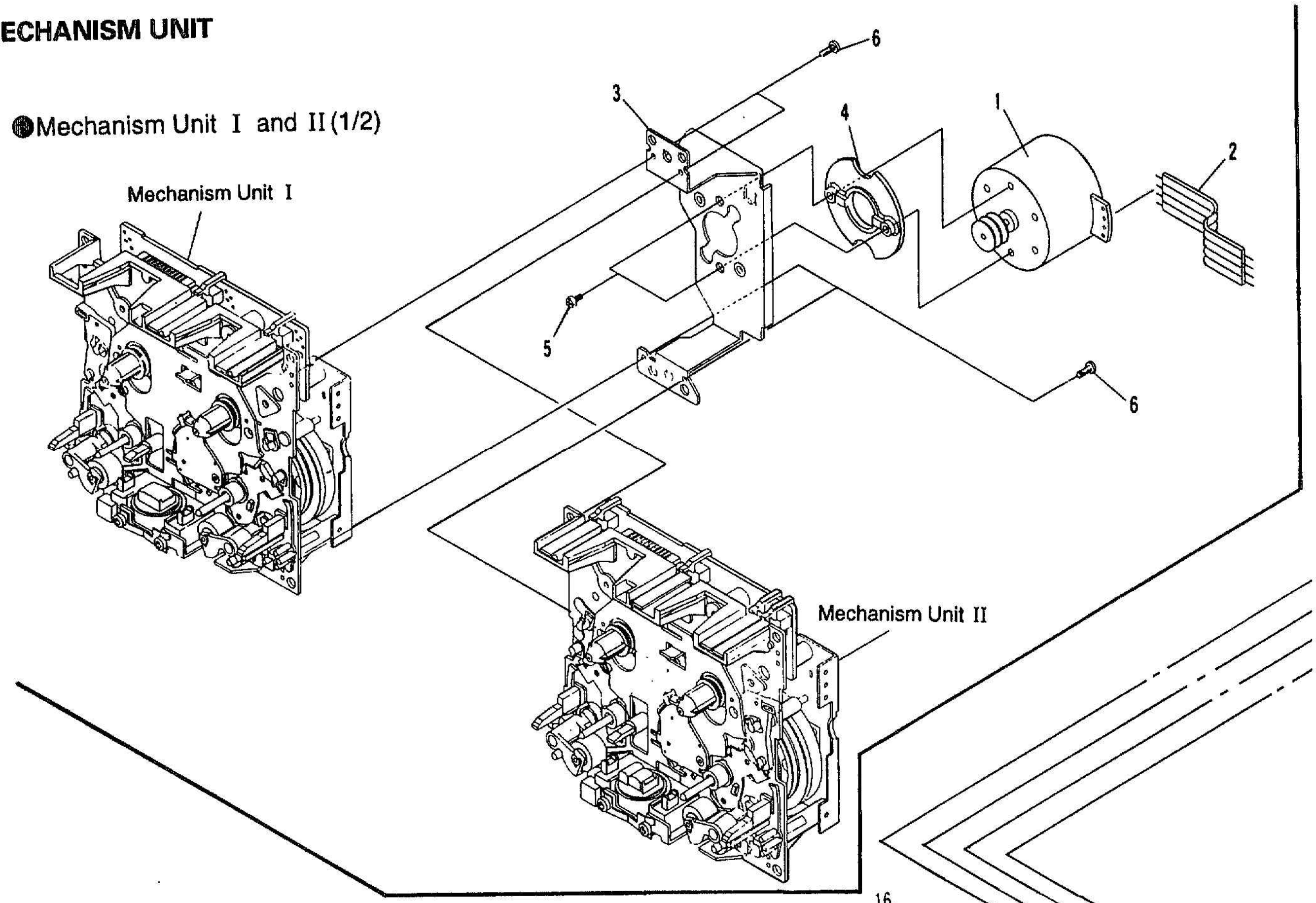
■ Mechanism unit I and II (2/2)

Mark	No.	Description	Parts No.
	1	ASSY HOLDER HEAD (*1)	RXA1400
	1	ASSY HOLDER HEAD (*2)	RXA1664
	2	FRAME HEAD	RNK1715
	3	LEVER HEAD	RNK1716
	4	SPRING AZIMUTH	RBK1006
	5	ASSY ARM ASSIST	RXA1401
	6	GEAR ARM HEAD	RNK1717
	7	SPRING CASSETTE	RBK1039
	8	EJECT LOCK	RNK1718
	9	CAP REEL	RNK1719
	10	ASSY PINCH ARM L	RXA1403
	11	CHASSIS HEAD	RNE1437
	12	ASSY PINCH ARM R	RXA1404
	13	ARM PLAY L	RNK1866
	14	GEAR PLAY	RNK1867
	15	ARM PLAY R	RNK1868
	16	CHASSIS OS	RXA1411
	17	ASSY SUB REEL L	RXA1407
	18	SOLENOID	RXP1020
	19	WIRE	RDC1006
	20	ARM RVS	RNK1721
	21	GEAR FF	RNK1723
	22	ASSY ARM FR	RXA1412
	23	ASSY PULLEY FR	RXA1413
	24	BELT FR	REB1292
	25	METAL	RNG1048
	26	ASSY FLYWHEEL L	RXA1690
	27	METAL	RNG1005
	28	ARM BRAKE	RNK1724
	29	ASSY SUB REEL R	RXA1408
	30	ARM TRIGER	RNK1722
	31	GEAR CAM	RNK1725
	32	METAL	RNG1049
	33	ASSY FLYWHEEL R	RXA1691
	34	METAL	RNG1004
	35	....	
	36	....	
	37	P. C. BOARD	RNP1610
	38	SWITCH MODE	RSN1020
	39	SWITCH (LEAF)	RSN1019
	40	HALL IC	DN6851A
	41	BRACKET FW (*1)	RNE1854
	41	BRACKET FW (*2)	RNE1438
	42	PULLEY (*1 only)	RNK2132
	43	....	
	44	BELT FW (*1 only)	REB1291
	45	BELT MAIN (* 1)	REB1290
	45	BELT MAIN (* 2)	REB1289
	46	P. C. BOARD	RNP1348
	47	HOUSING (*1)	RKP1396
	47	HOUSING (*2)	RKP1397
	48	CONNECTOR (*1)	RKP1713
	48	CONNECTOR (*2)	RKP1714
	49	ASSY HOLDER (*1 only)	RXA1689
	50	....	
	51	SPRING	RBH1282
	52	SPRING	RBH1283
	53	SPRING	RBH1284
	54	SPRING	RBH1286
	55	SPRING	RBH1288
	56	SPRING	RBH1291
	57	SPRING	RBH1285
	58	SPRING	RBH1287
	59	SPRING	RBH1289
	60	SPRING	RBH1290
	61	SPRING	RBH1292
	62	FWP SP (SPRING)	RBH1061
	63	SPRING	RBH1325
	64	SCREW (For AZIMUTH)	RBA1023
	65	SCREW	RBA1027
	66	SCREW	RBA1030
	67	SCREW	PCZ20P040FMC
	68	SCREW	RBA1093
	69	SCREW	RBA1094
	70	WASHER	RBF1046
	71	WASHER	WA26D047D013
	72	WASHER (*1 only)	WT13D030D025
	73	SCREW (*1 only)	RBA1118

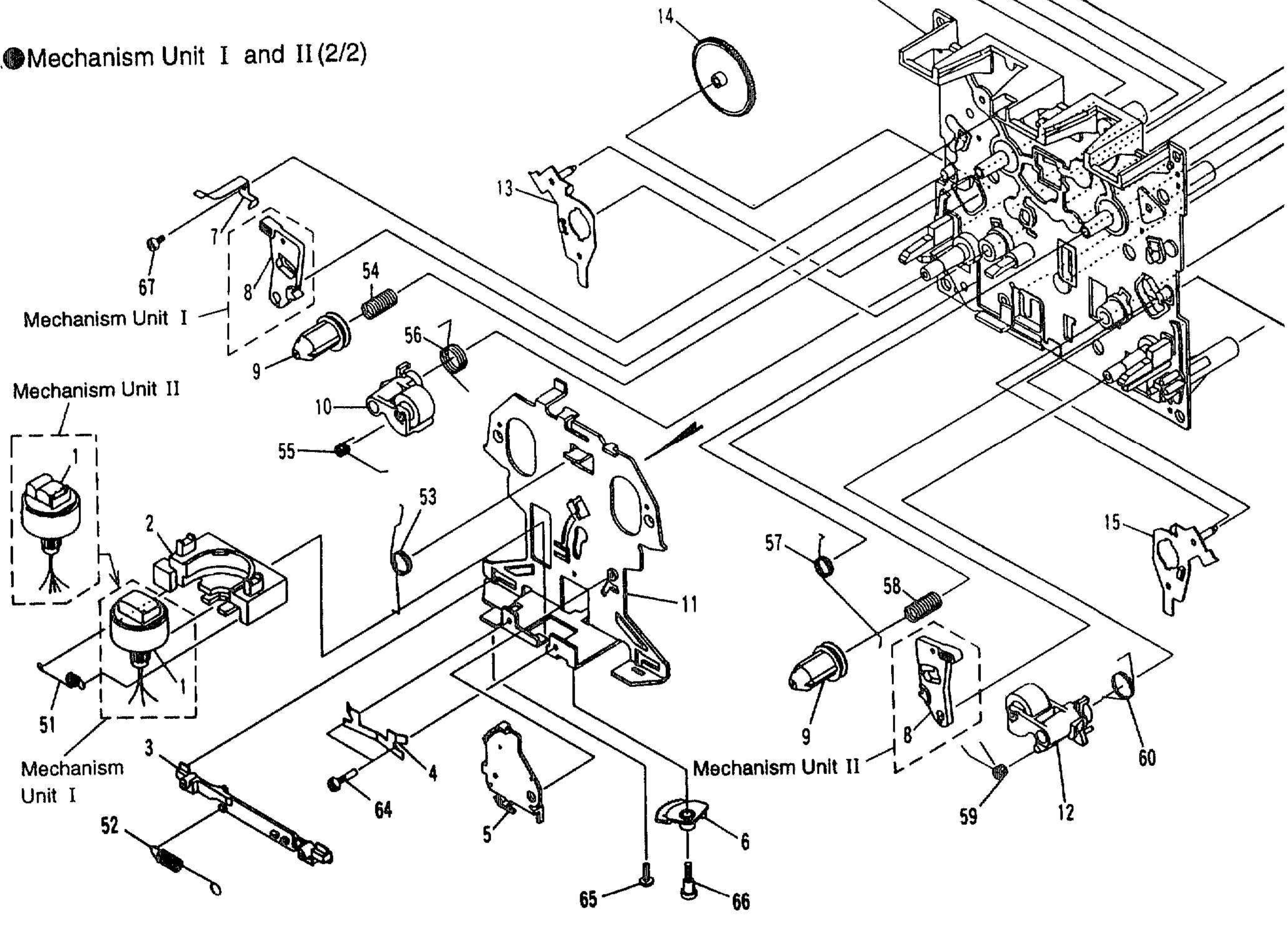
*Note) *1: Mechanism Unit I*
**2: Mechanism Unit II*

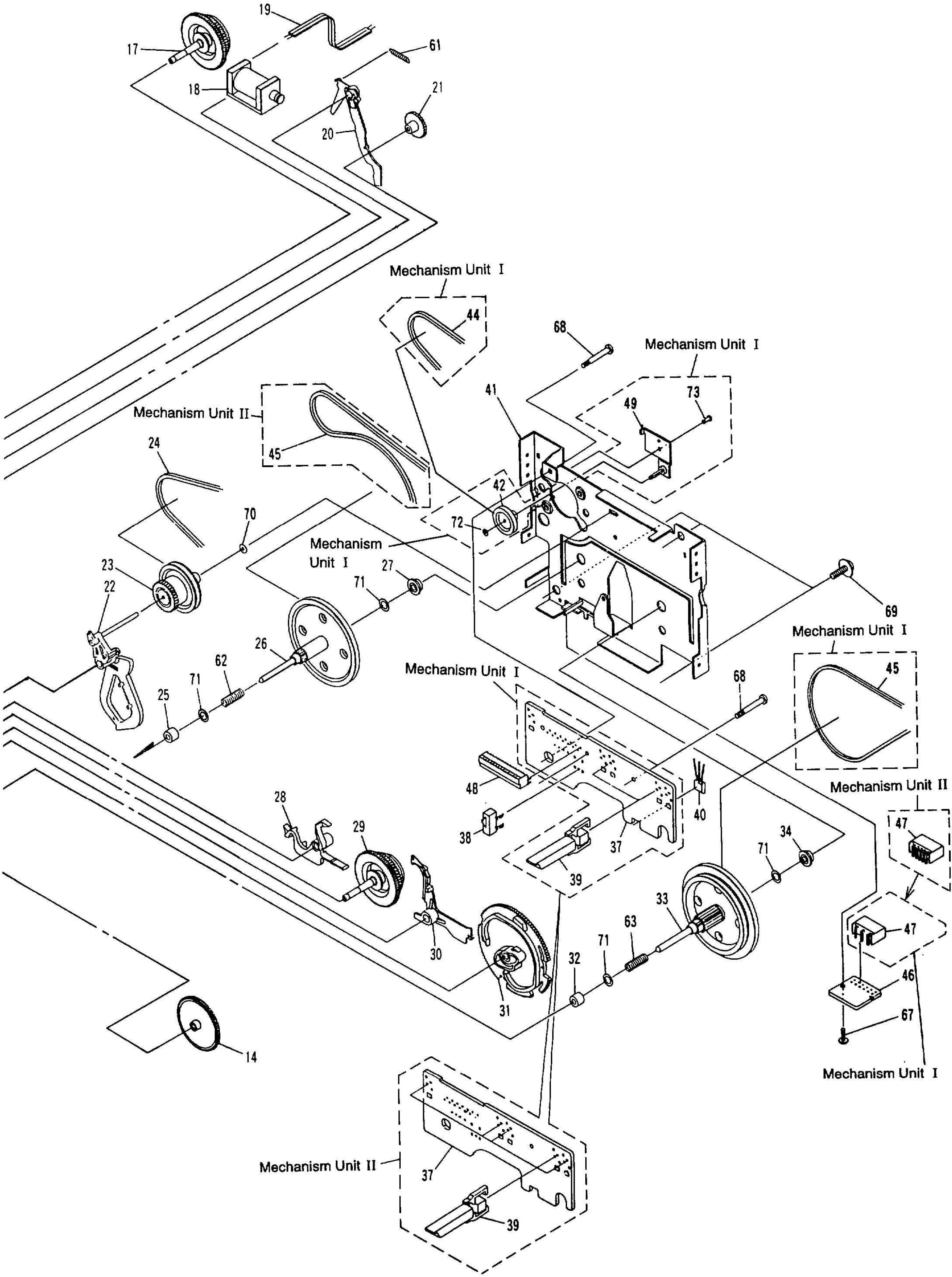
MECHANISM UNIT

●Mechanism Unit I and II (1/2)


Mechanism Unit I
Mechanism Unit II
1
2
3
4
5
6
6
6

●Mechanism Unit I and II (2/2)

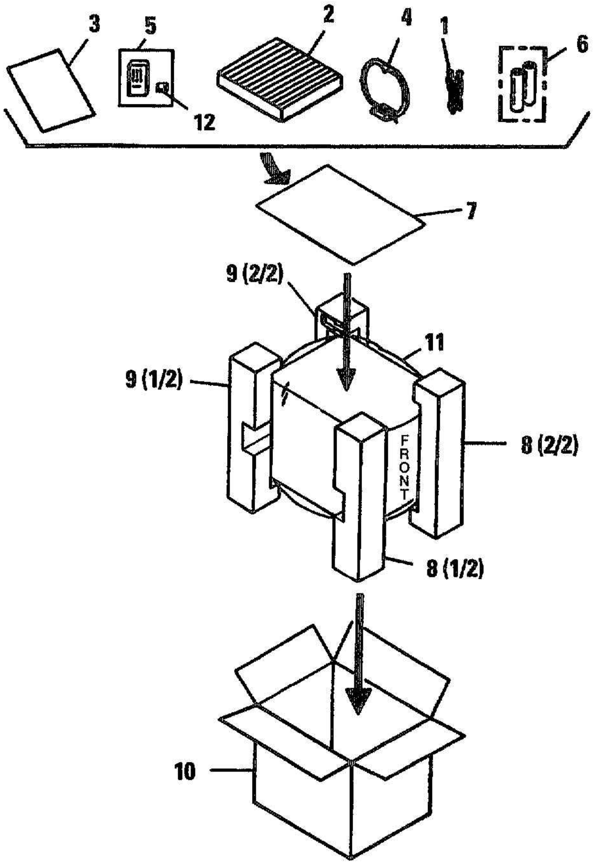

16
14
13
7
67
8
Mechanism Unit I
54
9
56
10
55
Mechanism Unit II
1
2
53
11
51
1
Mechanism Unit I
3
52
4
64
5
65
6
66
57
58
9
8
Mechanism Unit II
59
12
60
15


Mechanism Unit I
Mechanism Unit I
Mechanism Unit II
Mechanism
Unit I
Mechanism Unit I
Mechanism Unit I
Mechanism Unit II
Mechanism Unit I
Mechanism Unit II

3.7 PACKING

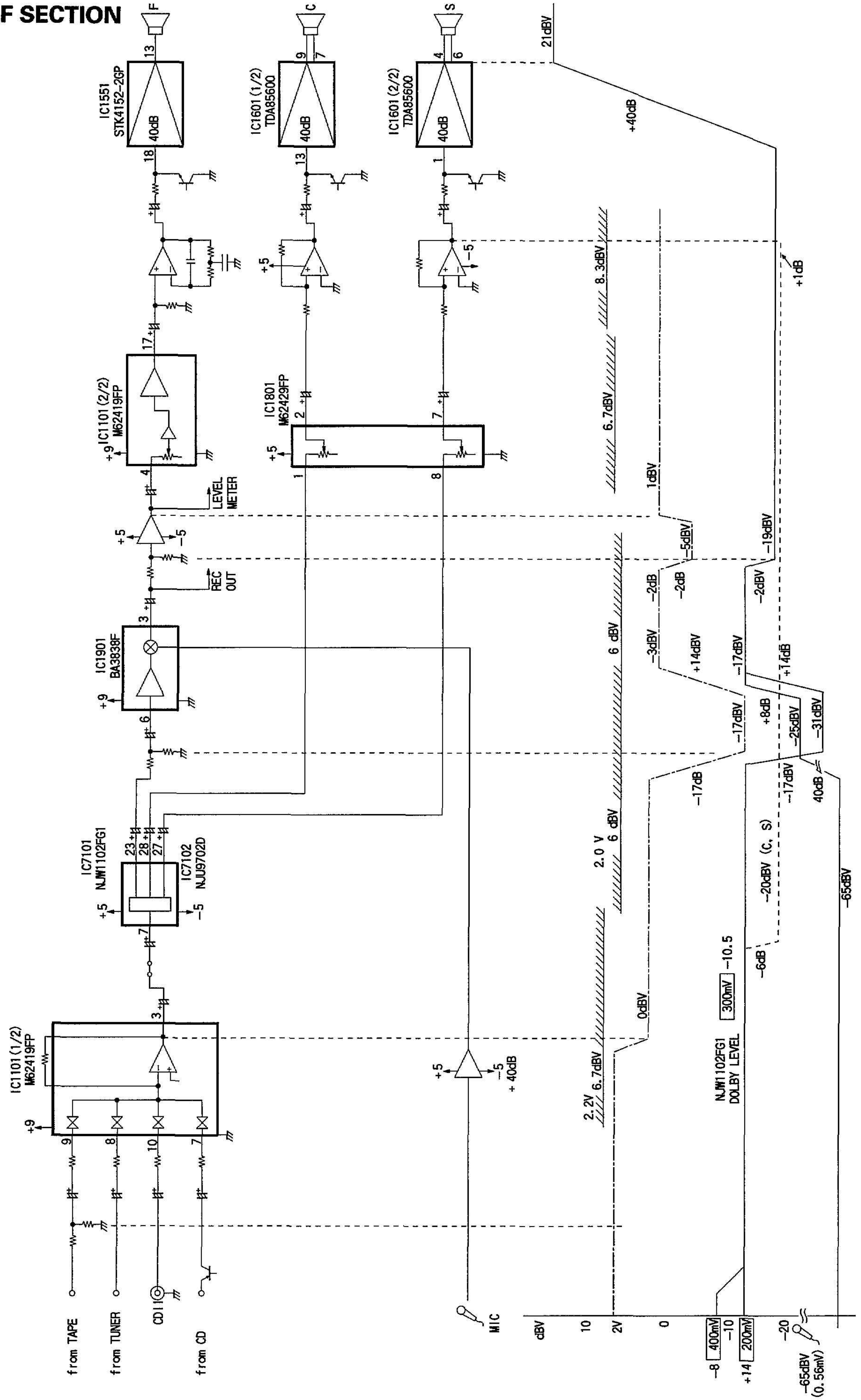
Parts List

Mark	No.	Description	Parts No.
	1	FM Antenna	ADH7007
	2	Case Rack	AMR7066
	3	Operating Instructions (English)	ARB7104
	4	Loop Antenna	ATB7004
	5	Remote Control Unit (CU-XR028)	AXD7103
NSP	6	Battery (R6P, AA)	VEM-013
NSP	7	Polyethylene Bag	Z21-040
	8	Front Pad LR	AHA7142
	9	Rear Pad LR	AHA7143
	10	Packing Case	AHD7393
	11	Packing Sheet	AHG7003
	12	Battery Cover	AZA7123

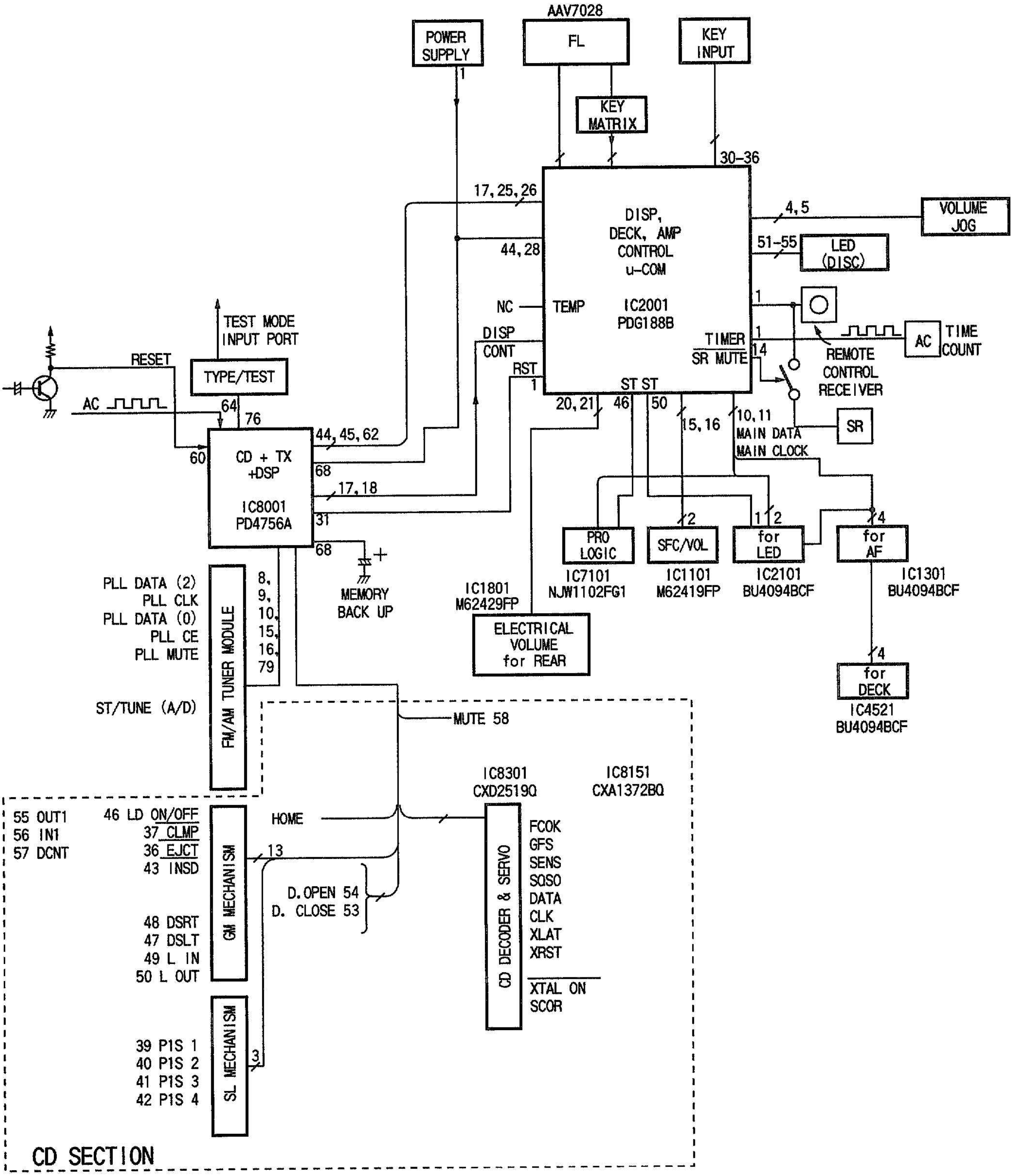


4. BLOCK DIAGRAM

4.1 AF SECTION


F
C
S
IC1551
STK4152-2GP
40dB
13
18
IC1601 (1/2)
TDA8560Q
9
7
13
IC1601 (2/2)
TDA8560Q
4
6
1
+5
-5
IC1101 (2/2)
M62419FP
+9
17
4
IC1801
M62429FP
+5
2
7
1
8
LEVEL METER
REC OUT
IC1901
BA3838F
+9
3
6
IC7101
NJM1102FG1
IC7102
NJU9702D
23
28
27
7
IC1101 (1/2)
M62419FP
+9
9
8
10
7
3
from TAPE
from TUNER
CD II
from CD
MIC
+ 40dB
21dBV
+40dB
+1dB
8.3dBV
6.7dBV
1dBV
-5dBV
-19dBV
-2dB
-2dB
-2dBV
-3dBV
+14dBV
-17dBV
+14dB
6 dBV
-17dBV
+8dB
-25dBV
-31dBV
-17dB
-17dBV
40dB
2.0 V
6 dBV
-20dBV (C, S)
-65dBV
NJM1102FG1 -10.5
300mV
-6dB
NJM1102FG1
DOLBY LEVEL
0dBV
2.2V
6.7dBV
dBV
10
2V
0
-8
400mV
-10
+14
200mV
-20
-65dBV
(0.56mV)

4.2 µ-COM SECTION


AAV7028
POWER SUPPLY
FL
KEY INPUT
KEY MATRIX
1
30-36
17, 25, 26
44, 28
DISP, DECK, AMP CONTROL u-COM
IC2001
PDG188B
NC
TEMP
DISP CONT
RST
1
TIMER
SR MUTE
ST ST
20, 21
46
50
15, 16
10, 11
MAIN DATA
MAIN CLOCK
4, 5
VOLUME JOG
51-55
LED (DISC)
1
1
14
REMOTE CONTROL RECEIVER
AC
TIME COUNT
SR
TEST MODE INPUT PORT
RESET
TYPE/TEST
AC
64
76
60
CD + TX +DSP
IC8001
PD4756A
44, 45, 62
68
17, 18
31
68
MEMORY BACK UP
PRO LOGIC
IC7101
NJW1102FG1
SFC/VOL
IC1101
M62419FP
2
for LED
IC2101
BU4094BCF
1
2
for AF
IC1301
BU4094BCF
4
4
for DECK
IC4521
BU4094BCF
IC1801
M62429FP
ELECTRICAL VOLUME for REAR
PLL DATA (2)
PLL CLK
PLL DATA (0)
PLL CE
PLL MUTE
ST/TUNE (A/D)
8, 9, 10, 15, 16, 79
FM/AM TUNER MODULE
MUTE 58
IC8301
CXD2519Q
IC8151
CXA1372BQ
55 OUT1
56 IN1
57 DCNT
46 LD ON/OFF
37 CLMP
36 EJCT
43 INSD
GM MECHANISM
HOME
13
D.OPEN 54
D. CLOSE 53
48 DSRT
47 DSLT
49 L IN
50 L OUT
CD DECODER & SERVO
FCOK
GFS
SENS
SQSO
DATA
CLK
XLAT
XRST
XTAL ON
SCOR
39 P1S 1
40 P1S 2
41 P1S 3
42 P1S 4
SL MECHANISM
3
CD SECTION

5. SCHEMATIC AND PCB CONNECTION DIAGRAMS

NOTE FOR SCHEMATIC DIAGRAMS (Type 1A)

1. **When ordering service parts, be sure to refer to "PARTS LIST of EXPLODED VIEWS" or "PCB PARTS LIST".**
2. **Since these are basic circuits, some parts of them or the values of some components may be changed for improvement.**
3. **RESISTORS:**
   Unit: k:kΩ, M:MΩ, or Ω unless otherwise noted.
   Rated power: 1/4W, 1/6W, 1/8W, 1/10W unless otherwise noted.
   Tolerance: (F): ±1%, (G): ±2%, (K): ±10%, (M): ±20% or ±5% unless otherwise noted.
4. **CAPACITORS:**
   Unit: p:pF or µF unless otherwise noted.
   Ratings: capacitor (µF)/ voltage (V) unless otherwise noted.
   Rated voltage: 50V except for electrolytic capacitors.
5. **COILS:**
   Unit: m:mH or µH unless otherwise noted.
6. **VOLTAGE AND CURRENT:**
   ☐V : Signal voltage at rated output.
   ☐ or ← V :
   DC voltage (V) at no input signal unless otherwise noted.
   Value in ( ) is DC voltage at rated power.
   ⇦ mA or ← mA :
   DC current at no input signal unless otherwise noted.
7. **OTHERS:**
   - ⊘ or ⊘ : Adjusting point.
   - ◄ : Measurement point.
   - The ⚠ mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.
8. **SCH-☐ ON THE SCHEMATIC DIAGRAM:**
   - SCH-☐ indicates the drawing number of the schematic diagram. (SCH stands for schematic diagram.)
9. **SWITCHES** (Underline indicates switch position):

CD DOOR ASSY
S2101 : 6—10
S2102: 16—20
S2103: 21—25
S2104: 1—5
S2105: 11—15
S2106: MD/CD2
S2107: CD
S2108: AM/FM
S2109 : TAPE

OPE. RIGHT ASSY
S2201 : STOP
S2202: START
S2208: ▶▶, ▶▶I
S2209: I◀◀, ◀◀
S2210: FREQ/STATION
S2211: PROGRAM

OPE. LEFT ASSY
S2301: ASES/COPY
S2302: POWER STANDBY/ON
S2303: BEST A
S2304: BEST B
S2307: DOLBY
S2308: REC/STOP
S2309: RENTAL ASES

JOG ASSY
S2401 : ENTER
S2402: NAME
S2403: PROLOGIC
S2405: CENTER MODE

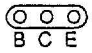
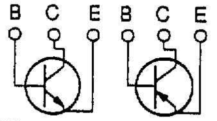
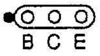
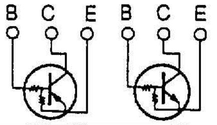
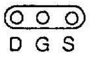
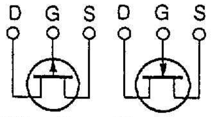
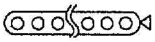
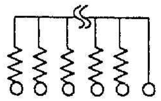
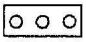
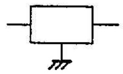
SW1 ASSY
S2203: STATION MEMORY
S2204: DISPLAY CLOCK ADJ
S2205: TIMER REC/WAKE-UP
S2206: P.BASS(DEMO)
S2207: SFC/KARAOKE

CD DOOR SW ASSY
S8002: OPEN
S8003: CLOSE

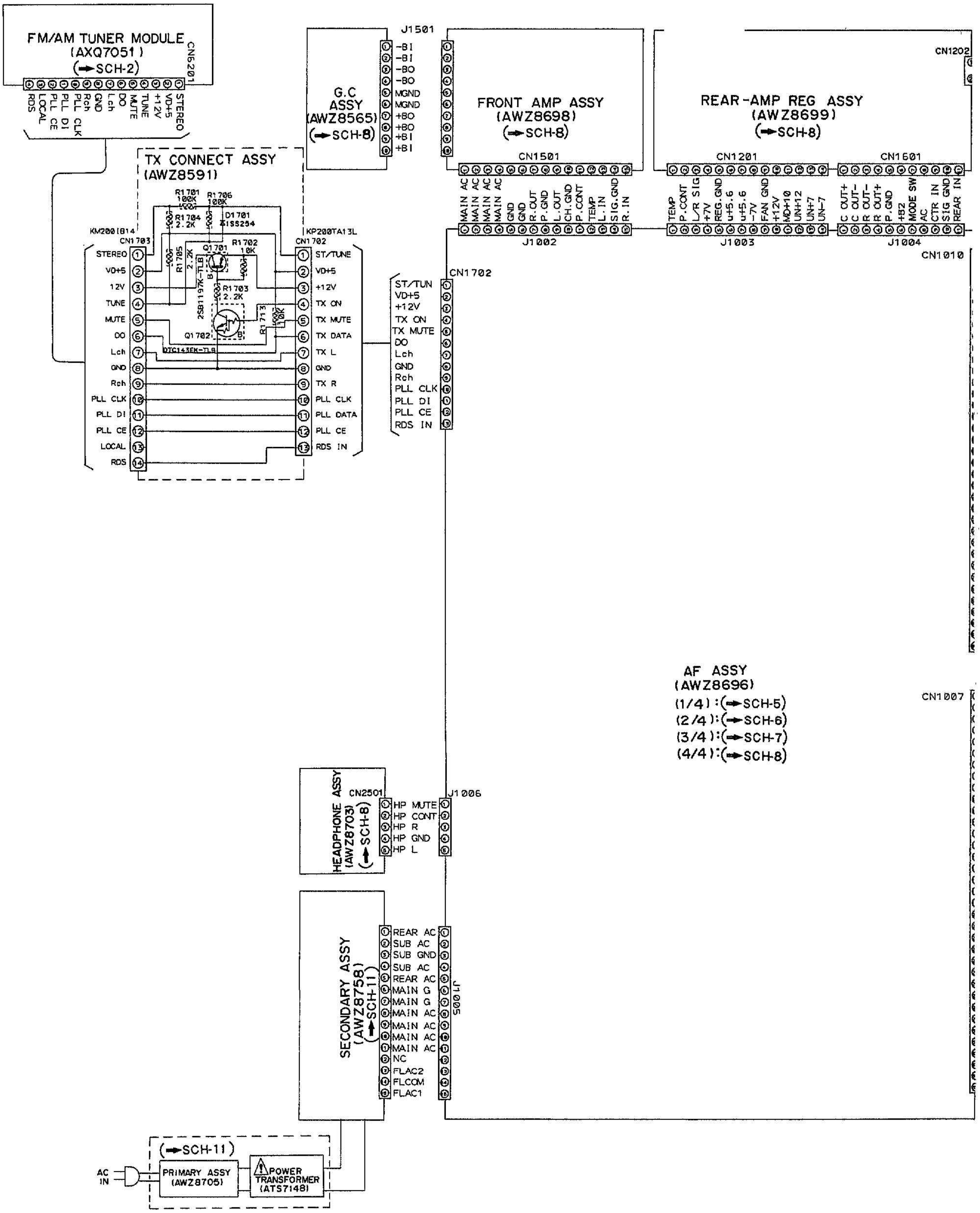
SW2 ASSY
S2305: SLOT EJECT
S2306: 25 EJECT

NOTE FOR PCB DIAGRAMS:

1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

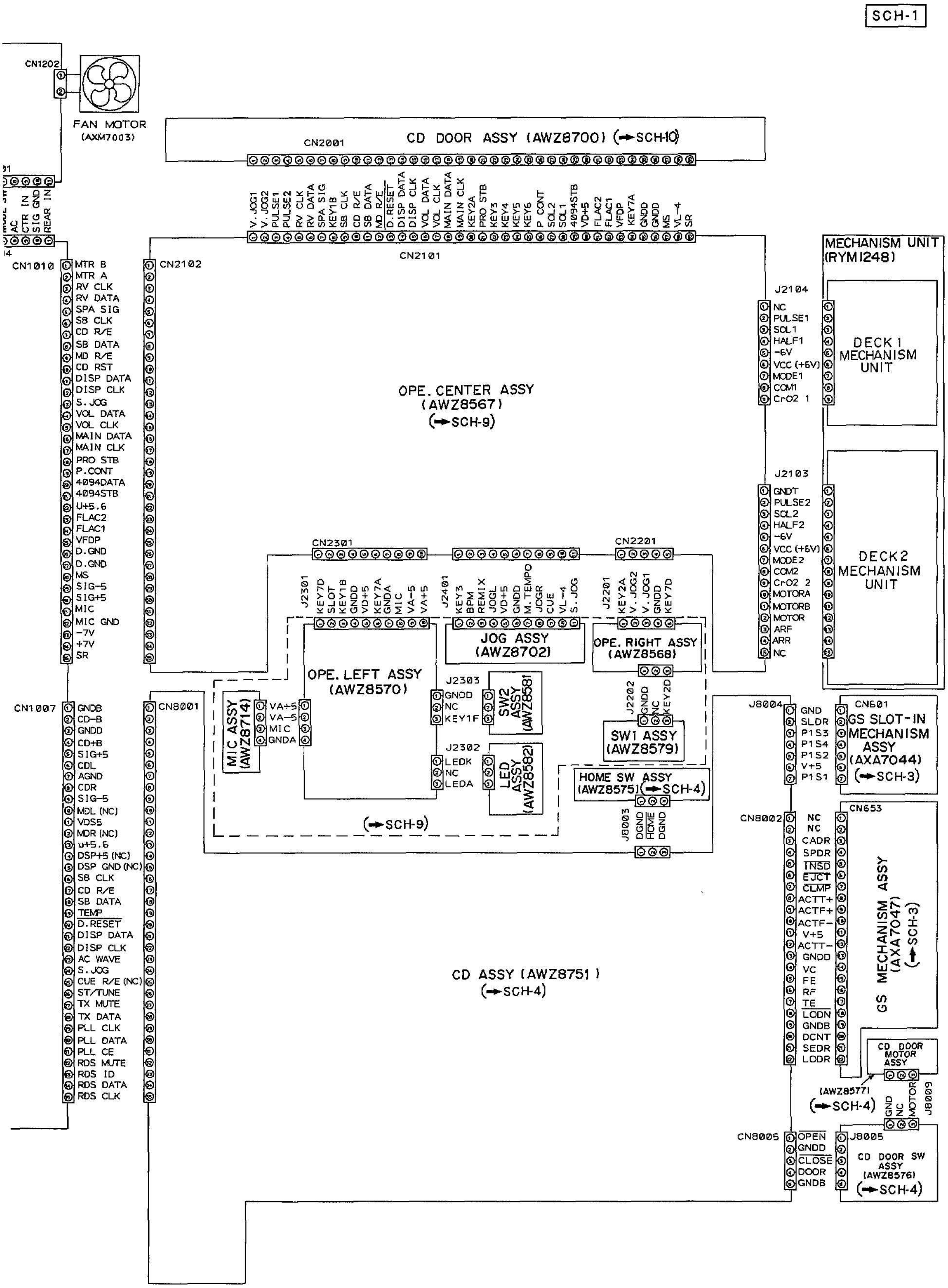
Symbol in PCB Diagrams	Symbol in Schematic Diagrams	Part Name
		Transistor
		Transistor with resistor
		Field effect transistor
		Resistor array
		3- terminal regulator

5.1 OVERALL WIRING DIAGRAM AND TX CONNECT ASSY


FM/AM TUNER MODULE
(AXQ7051)
(➡SCH-2)
CN6201
STEREO
VD+5
+12V
TUNE
MUTE
DO
Lch
GND
Rch
PLL CLK
PLL DI
PLL CE
LOCAL
RDS
G.C ASSY
(AWZ8565)
(➡SCH-8)
J1501
-B I
-B I
-BO
-BO
MGND
MGND
+BO
+BO
+B I
+B I
FRONT AMP ASSY
(AWZ8698)
(➡SCH-8)
CN1501
REAR-AMP REG ASSY
(AWZ8699)
(➡SCH-8)
CN1202
CN1201
CN1601
MAIN AC
MAIN AC
MAIN AC
MAIN AC
GND
GND
R.OUT
P.GND
L.OUT
CH.GND
P.CONT
TEMP
L.IN
SIG.GND
R.IN
TEMP
P.CONT
L/R SIG
+7V
REG.GND
u+5.6
u+5.6
-7V
FAN GND
+12V
MD+10
UN+12
UN+7
UN-7
C OUT+
C OUT-
R OUT-
R OUT+
P.GND
+B2
MODE SW
AC
CTR IN
SIG GND
REAR IN
J1002
J1003
J1004
CN1010
TX CONNECT ASSY
(AWZ8591)
R1701 100K
R1706 100K
R1704 2.2K
D1701 1SS254
R1705 2.2K
Q1701
R1702 10K
2SB1197K-TLB
R1703 2.2K
R1713 10K
Q1702
DTC143EK-TLB
KM200IB14
CN1703
STEREO
VD+5
12V
TUNE
MUTE
DO
Lch
GND
Rch
PLL CLK
PLL DI
PLL CE
LOCAL
RDS
KP200TA13L
CN1702
ST/TUNE
VD+5
+12V
TX ON
TX MUTE
TX DATA
TX L
GND
TX R
PLL CLK
PLL DATA
PLL CE
RDS IN
CN1702
ST/TUN
VD+5
+12V
TX ON
TX MUTE
DO
Lch
GND
Rch
PLL CLK
PLL DI
PLL CE
RDS IN
AF ASSY
(AWZ8696)
(1/4):(➡SCH-5)
(2/4):(➡SCH-6)
(3/4):(➡SCH-7)
(4/4):(➡SCH-8)
CN1007
HEADPHONE ASSY
(AWZ8703)
(➡SCH-8)
CN2501
HP MUTE
HP CONT
HP R
HP GND
HP L
J1006
SECONDARY ASSY
(AWZ8758)
(➡SCH-11)
REAR AC
SUB AC
SUB GND
SUB AC
REAR AC
MAIN G
MAIN G
MAIN AC
MAIN AC
MAIN AC
MAIN AC
NC
FLAC2
FLCOM
FLAC1
J1005
(➡SCH-11)
AC IN
PRIMARY ASSY
(AWZ8705)
POWER TRANSFORMER
(ATS7148)

SCH-1

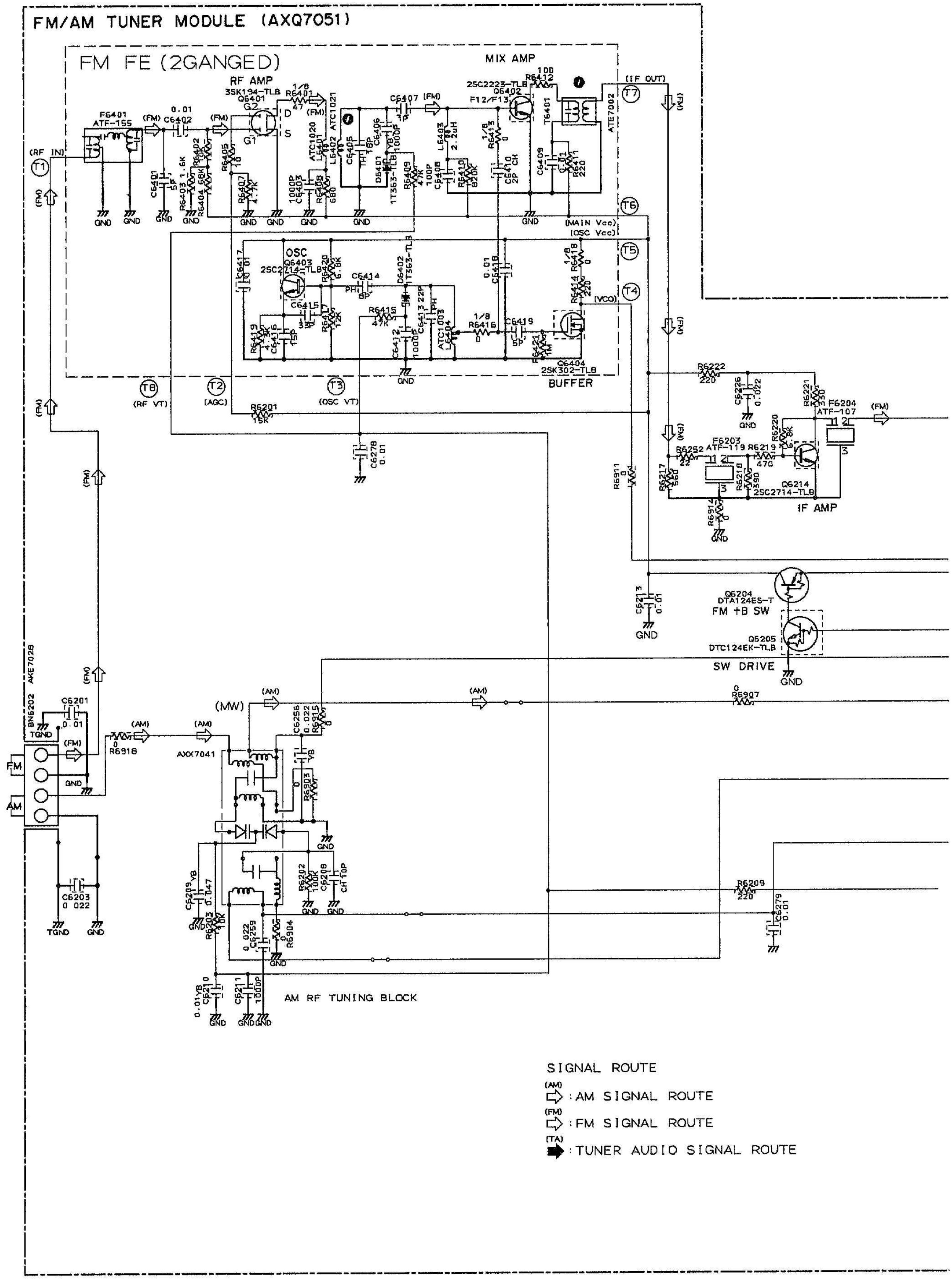
OVERALL WIRING DIAGRAM,
TX CONNECT ASSY


SCH-1
CN1202
FAN MOTOR
(AXM7003)
CD DOOR ASSY (AWZ8700) (→SCH-10)
CN2001
V.JOG1
V.JOG2
PULSE1
PULSE2
RV CLK
RV DATA
SPA SIG
KEY1B
SB CLK
CD R/E
SB DATA
MD R/E
D.RESET
DISP DATA
DISP CLK
VOL DATA
VOL CLK
MAIN DATA
MAIN CLK
KEY2A
PRO STB
KEY3
KEY4
KEY5
KEY6
P CONT
SOL2
SOL1
4094STB
VD+5
FLAC2
FLAC1
VFDP
KEY7A
GNDD
GNDD
MS
VL-4
SR
CN2101
AC
CTR IN
SIG GND
REAR IN
CN1010
MTR B
MTR A
RV CLK
RV DATA
SPA SIG
SB CLK
CD R/E
SB DATA
MD R/E
CD RST
DISP DATA
DISP CLK
S.JOG
VOL DATA
VOL CLK
MAIN DATA
MAIN CLK
PRO STB
P.CONT
4094DATA
4094STB
U+5.6
FLAC2
FLAC1
VFDP
D.GND
D.GND
MS
SIG-5
SIG+5
MIC
MIC GND
-7V
+7V
SR
CN2102
OPE.CENTER ASSY
(AWZ8567)
(→SCH-9)
MECHANISM UNIT
(RYM1248)
J2104
NC
PULSE1
SOL1
HALF1
-6V
VCC (+6V)
MODE1
COM1
CrO2 1
DECK 1
MECHANISM
UNIT
J2103
GNDT
PULSE2
SOL2
HALF2
-6V
VCC (+6V)
MODE2
COM2
CrO2 2
MOTORA
MOTORB
MOTOR
ARF
ARR
NC
DECK2
MECHANISM
UNIT
CN2301
CN2201
J2301
KEY7D
SLOT
KEY1B
GNDD
VD+5
KEY7A
GNDA
MIC
VA-5
VA+5
J2401
KEY3
BPM
REMIX
JOGL
VD+5
GNDD
M.TEMPO
JOGR
CUE
VL-4
S.JOG
J2201
KEY2A
V.JOG2
V.JOG1
GNDD
KEY7D
JOG ASSY
(AWZ8702)
OPE.RIGHT ASSY
(AWZ8568)
OPE.LEFT ASSY
(AWZ8570)
J2303
GNDD
NC
KEY1F
SW2 ASSY
(AWZ8581)
J2302
LEDK
NC
LEDA
LED ASSY
(AWZ8582)
MIC ASSY
(AWZ8714)
VA+5
VA-5
MIC
GNDA
J2202
GNDD
NC
KEY2D
SW1 ASSY
(AWZ8579)
HOME SW ASSY
(AWZ8575)(→SCH-4)
J8003
DGND
HOME
DGND
(→SCH-9)
CN1007
GNDB
CD-B
GNDD
CD+B
SIG+5
CDL
AGND
CDR
SIG-5
MDL (NC)
VDS5
MDR (NC)
U+5.6
DSP+5 (NC)
DSP GND (NC)
SB CLK
CD R/E
SB DATA
TEMP
D.RESET
DISP DATA
DISP CLK
AC WAVE
S.JOG
CUE R/E (NC)
ST/TUNE
TX MUTE
TX DATA
PLL CLK
PLL DATA
PLL CE
RDS MUTE
RDS ID
RDS DATA
RDS CLK
CN8001
J8004
GND
SLDR
P1S3
P1S4
P1S2
V+5
P1S1
CN601
GS SLOT-IN
MECHANISM
ASSY
(AXA7044)
(→SCH-3)
CN8002
NC
NC
CADR
SPDR
INSD
EJCT
CLMP
ACTT+
ACTF+
ACTF-
V+5
ACTT-
GNDD
VC
FE
RF
TE
LODN
GNDB
DCNT
SEDR
LODR
CN653
GS MECHANISM ASSY
(AXA7047)
(→SCH-3)
CD ASSY (AWZ8751)
(→SCH-4)
CD DOOR
MOTOR
ASSY
(AWZ8577)
(→SCH-4)
GND
NC
MOTOR
J8009
CN8005
OPEN
GNDD
CLOSE
DOOR
GNDB
J8005
CD DOOR SW
ASSY
(AWZ8576)
(→SCH-4)

OVERALL WIRING DIAGRAM,
TX CONNECT ASSY

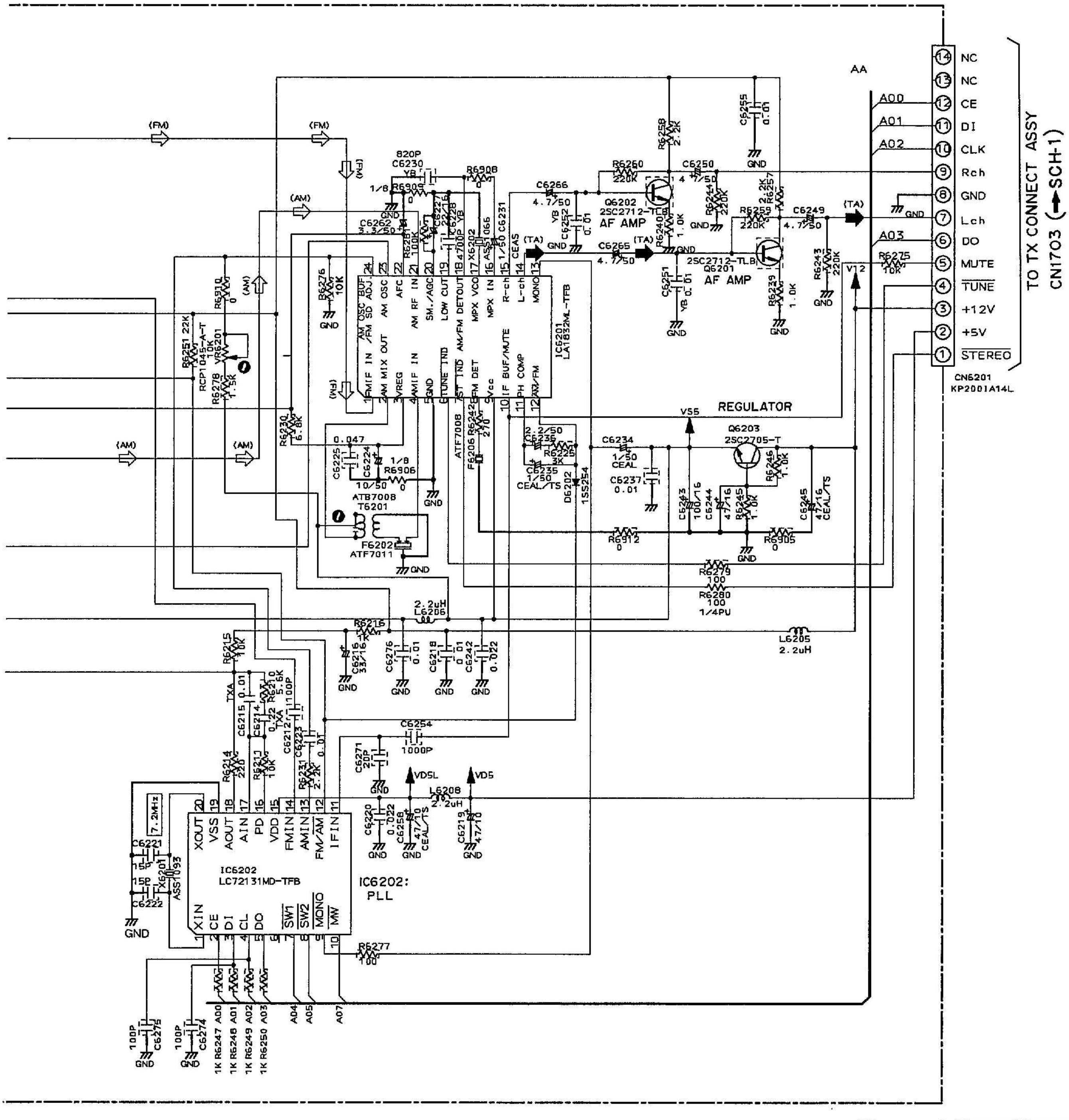
SCH-1

5.2 FM/AM TUNER MODULE


FM/AM TUNER MODULE (AXQ7051)
FM FE (2GANGED)
RF AMP
3SK194-TLB
Q6401
MIX AMP
2SC2223-TLB
Q6402
F12/F13
(IF OUT)
ATE7002
T6401
F6401
ATF-155
(RF IN)
T1
T2
T3
T4
T5
T6
T7
T8
(MAIN Vcc)
(OSC Vcc)
(VCO)
(RF VT)
(AGC)
(OSC VT)
OSC
Q6403
2SC2714-TLB
D6401
1T363-TLB
D6402
1T363-TLB
L6402
ATC1020
ATC1021
L6403
2.2uH
L6404
ATC1003
Q6404
2SK302-TLB
BUFFER
GND
R6201
15K
C6278
0.01
R6911
R6222
220
C6226
0.022
R6221
330
F6204
ATF-107
F6203
ATF-119
R6252
22
R6219
470
R6220
6.8K
R6217
560
R6218
390
R6914
Q6214
2SC2714-TLB
IF AMP
C6213
0.01
Q6204
DTA124ES-T
FM +B SW
Q6205
DTC124EK-TLB
SW DRIVE
BN6202 AKE7028
C6201
0.01
TGND
FM
AM
R6918
C6203
0.022
(MW)
AXX7041
C6256
0.022
R6915
R6903
R6202
100K
C6208
CH 10P
C6209
0.047
R6203
10K
C6259
0.022
R6904
C6210
0.01
C6211
1000P
AM RF TUNING BLOCK
R6907
R6209
220
C6279
0.01
(AM)
(FM)
SIGNAL ROUTE
(AM) ⇨ : AM SIGNAL ROUTE
(FM) ⇨ : FM SIGNAL ROUTE
(TA) ➡ : TUNER AUDIO SIGNAL ROUTE

SCH-2

FM/AM TUNER MODULE

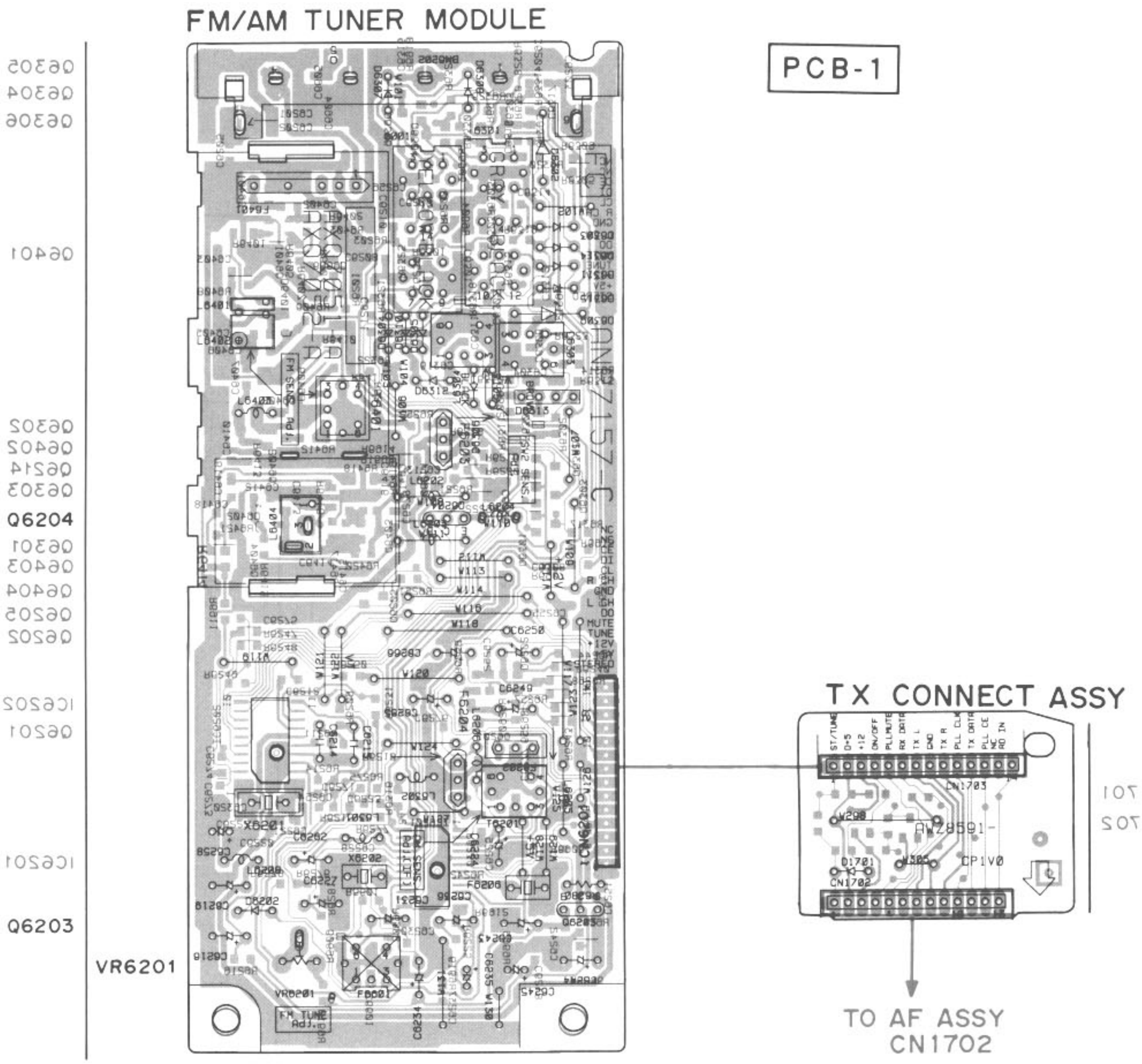

IC6201
LA1832ML-TFB
IC6202
LC72131MD-TFB
IC6202: PLL
REGULATOR
Q6203
2SC2705-T
Q6202
2SC2712-TLB
AF AMP
Q6201
2SC2712-TLB
AF AMP
AA
A00
A01
A02
A03
V12
V55
VDSL
VD5
(FM)
(AM)
(TA)
7.2MHz
X6201
ASS1093
T6201
ATB7008
F6202
ATF7011
F6206
ATF7008
X6202
ASS1066
VR6201
RCP1045-A-T
L6205
2.2uH
L6206
2.2uH
L6208
2.2uH
D6202
1SS254
NC
NC
CE
DI
CLK
Rch
GND
Lch
DO
MUTE
TUNE
+12V
+5V
STEREO
CN6201
KP2001A14L
TO TX CONNECT ASSY
CN1703 (→SCH-1)
AM OSC BUF
/FM SD ADJ.
AM OSC
AFC
AM RF IN
SM./AGC
LOW CUT
AM/FM DETOUT
MPX VCO
MPX IN
R-ch
L-ch
MONO
FMIF IN
AM MIX OUT
VREG
AMIF IN
GND
TUNE IND
ST IND
FM DET
Vcc
IF BUF/MUTE
PH COMP
AM/FM
XOUT
VSS
AOUT
AIN
PD
VDD
FMIN
AMIN
FM/AM
IFIN
XIN
CE
DI
CL
DO
SW1
SW2
MONO
MW
GND

FM/AM TUNER MODULE

SCH-2

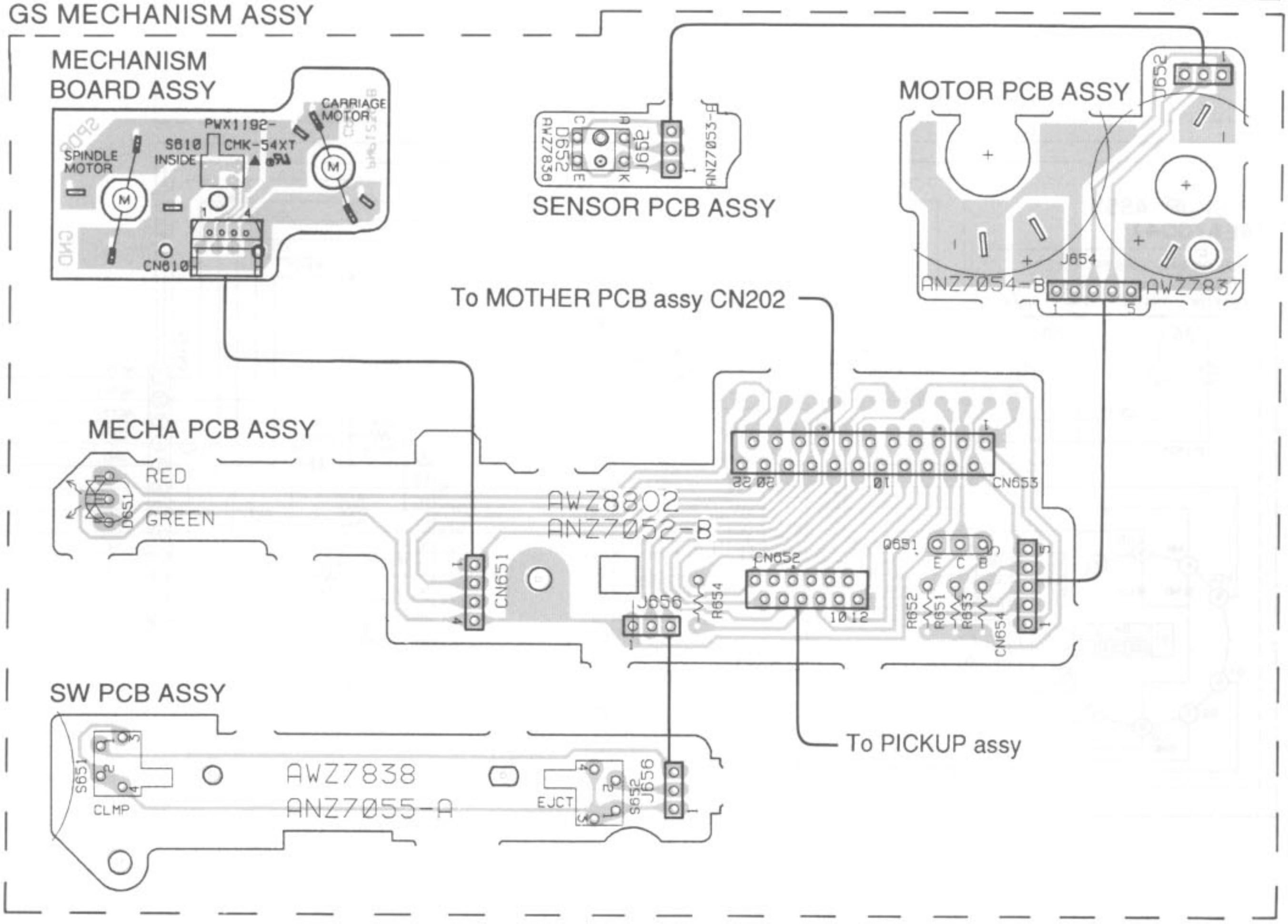
- This diagram is viewed from the mounted parts side.

- The parts mounted on this PCB include all necessary parts for several destinations. For further infromation for respective destinations, be sure to check with the schematic diagram.


FM/AM TUNER MODULE
PCB-1
Q6204
Q6203
VR6201
FM TUNE Adj.
CN6201
TX CONNECT ASSY
ST/TUNE
D+5
+12
ON/OFF
PLL/MUTE
RX DATA
TX L
GND
TX R
PLL CLK
TX DATA
PLL CE
NC
RD IN
CN1703
W290
AW28591-
D1701
W305
CP1V0
CN1702
TO AF ASSY
CN1702

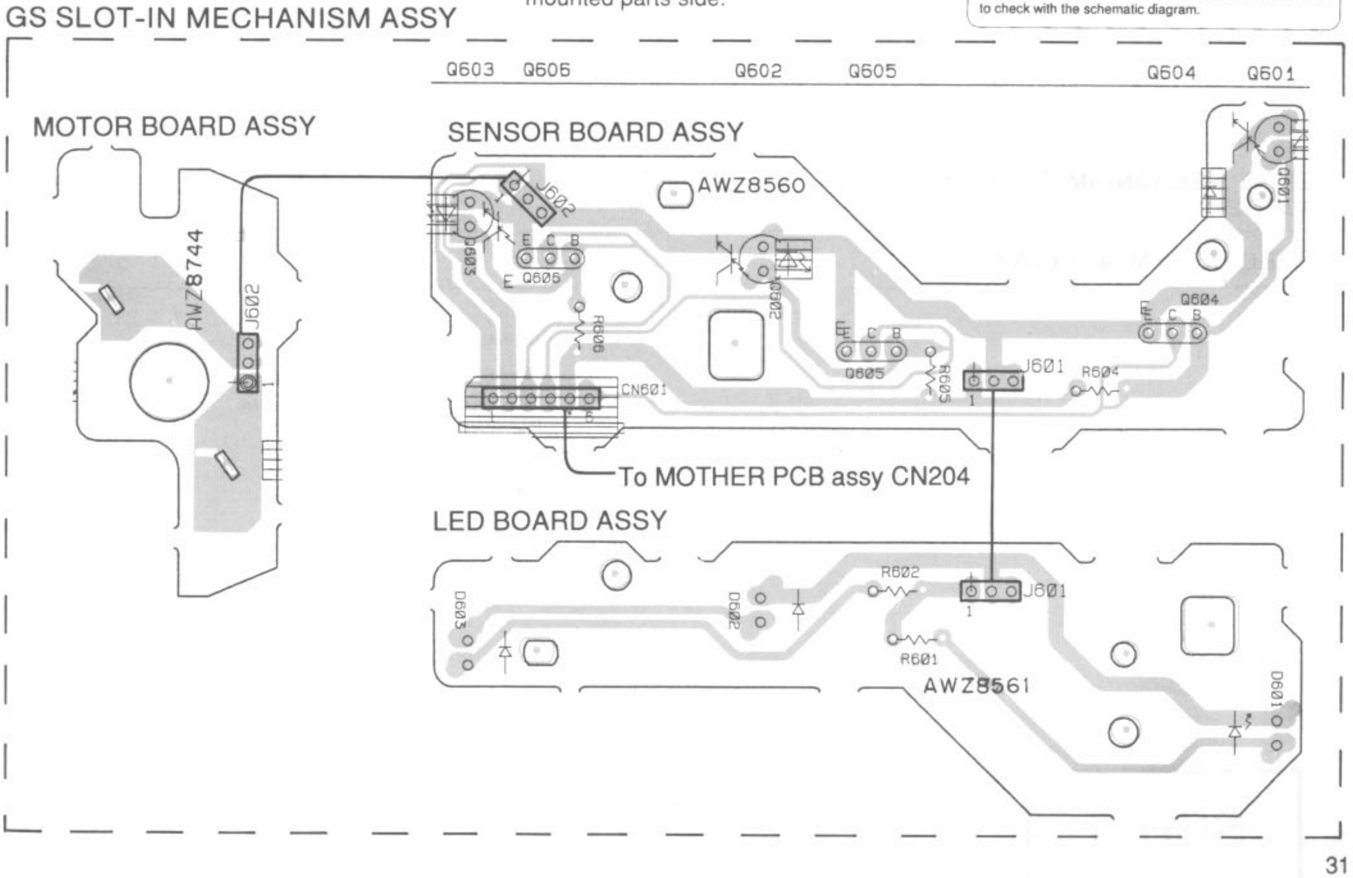
5.3 GS MECHANISM AND GS SLOT-IN MECHANISM ASSEMBLIES

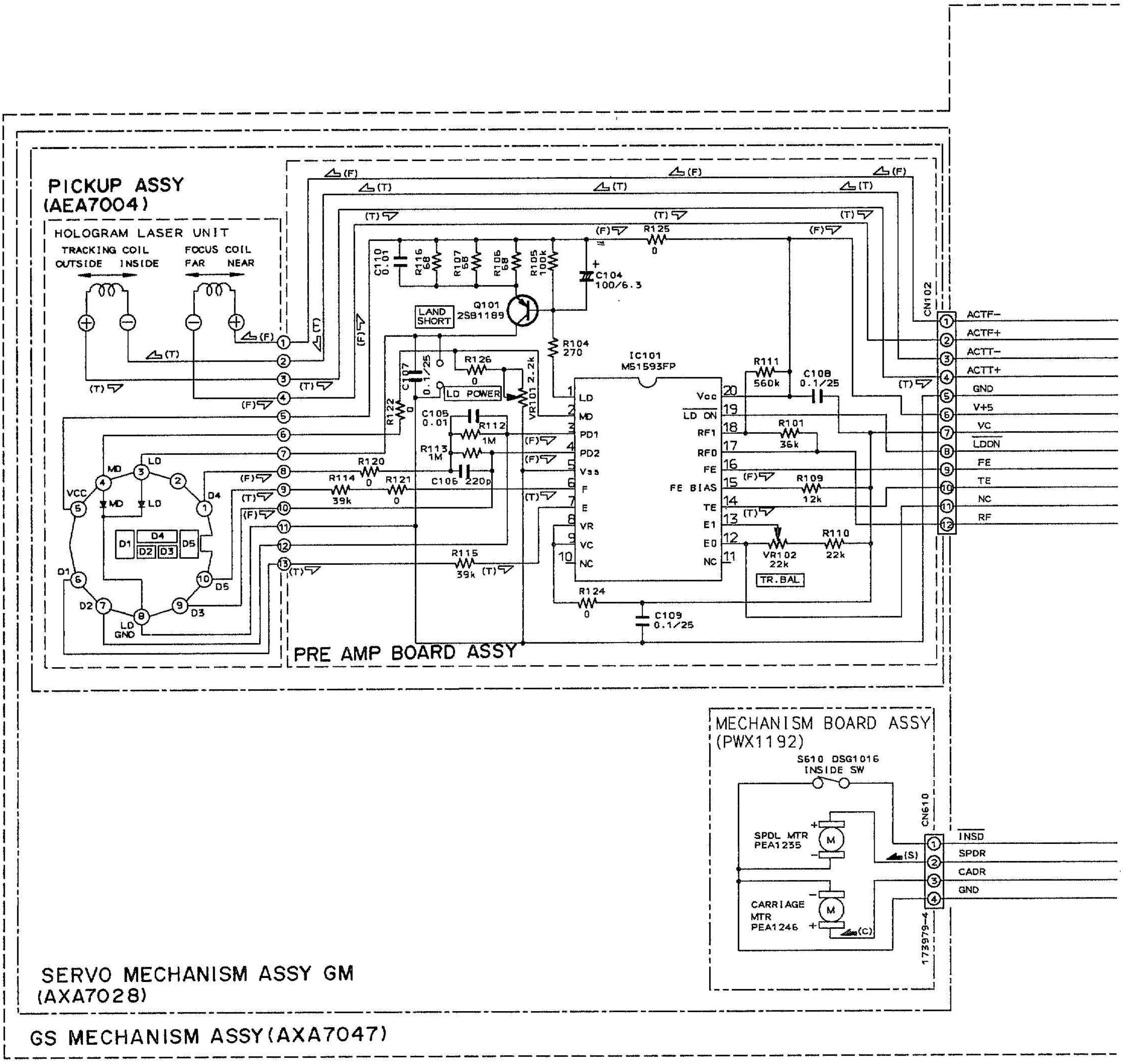
PCB-2


GS MECHANISM ASSY
MECHANISM BOARD ASSY
SPINDLE MOTOR
CARRIAGE MOTOR
PWX1192-
S610 INSIDE
CMK-54XT
CN610
SENSOR PCB ASSY
D652
J652
ANZ7053-B
AWZ7836
MOTOR PCB ASSY
J652
J654
ANZ7054-B
AWZ7837
To MOTHER PCB assy CN202
MECHA PCB ASSY
RED
GREEN
D651
AWZ8802
ANZ7052-B
CN651
CN652
CN653
CN654
J656
R654
Q651
E C B
R652
R651
R653
To PICKUP assy
SW PCB ASSY
S651
CLMP
AWZ7838
ANZ7055-A
EJCT
S652
J656

- This diagram is viewed from the mounted parts side.

The parts mounted on this PCB include all necessary parts for several destinations.
For further information for respective destinations, be sure to check with the schematic diagram.


GS SLOT-IN MECHANISM ASSY
Q603
Q606
Q602
Q605
Q604
Q601
MOTOR BOARD ASSY
AWZ8744
J602
SENSOR BOARD ASSY
J602
AWZ8560
Q603
Q606
E C B
R606
Q602
Q605
R605
J601
R604
Q604
Q601
CN601
To MOTHER PCB assy CN204
LED BOARD ASSY
D603
D602
R602
J601
R601
AWZ8561
D601


PICKUP ASSY
(AEA7004)
HOLOGRAM LASER UNIT
TRACKING COIL
OUTSIDE INSIDE
FOCUS COIL
FAR NEAR
LD
MD
VCC
D4
D1
D2
D3
D5
LD GND
PRE AMP BOARD ASSY
C110 0.01
R116 68
R107 68
R106 68
R105 100k
C104 100/6.3
R125 0
LAND SHORT
Q101 2SB1189
R104 270
IC101 M51593FP
R126 0
C107 0.1/25
LD POWER
VR101 2.2k
R122 0
C105 0.01
R112 1M
R113 1M
C106 220p
R120 0
R114 39k
R121 0
R115 39k
R124 0
C109 0.1/25
R111 560k
C108 0.1/25
R101 36k
R109 12k
R110 22k
VR102 22k
TR.BAL
LD
MD
PD1
PD2
Vss
F
E
VR
VC
NC
Vcc
LD ON
RF1
RFO
FE
FE BIAS
TE
E1
E0
NC
CN102
ACTF-
ACTF+
ACTT-
ACTT+
GND
V+5
VC
LDON
FE
TE
NC
RF
MECHANISM BOARD ASSY
(PWX1192)
S610 DSG1016
INSIDE SW
SPDL MTR
PEA1235
CARRIAGE
MTR
PEA1246
CN610
173979-4
INSD
SPDR
CADR
GND
SERVO MECHANISM ASSY GM
(AXA7028)
GS MECHANISM ASSY(AXA7047)

SIGNAL ROUTE

(F) : FOCUS SERVO LOOP LINE

(T) : TRACKING SERVO LOOP LINE

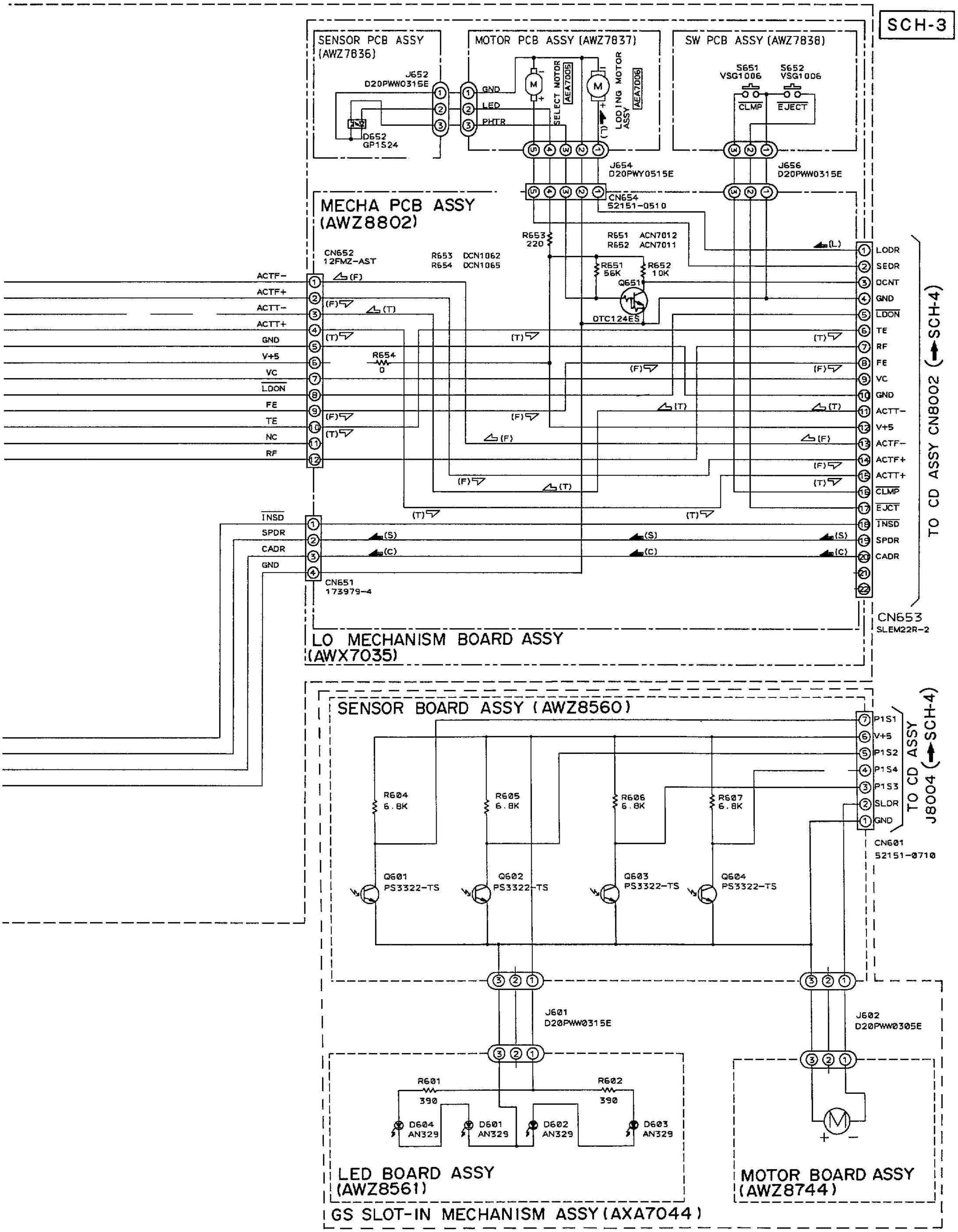
(L) : LOADING MOTOR ROUTE

(S) : SPINDLE MOTOR ROUTE

(C) : CARRIAGE MOTOR ROUTE

SCH-3

GS MECHANISM ASSEMBLIE
GS SLOT-IN MECHANISM ASSEMBLIE

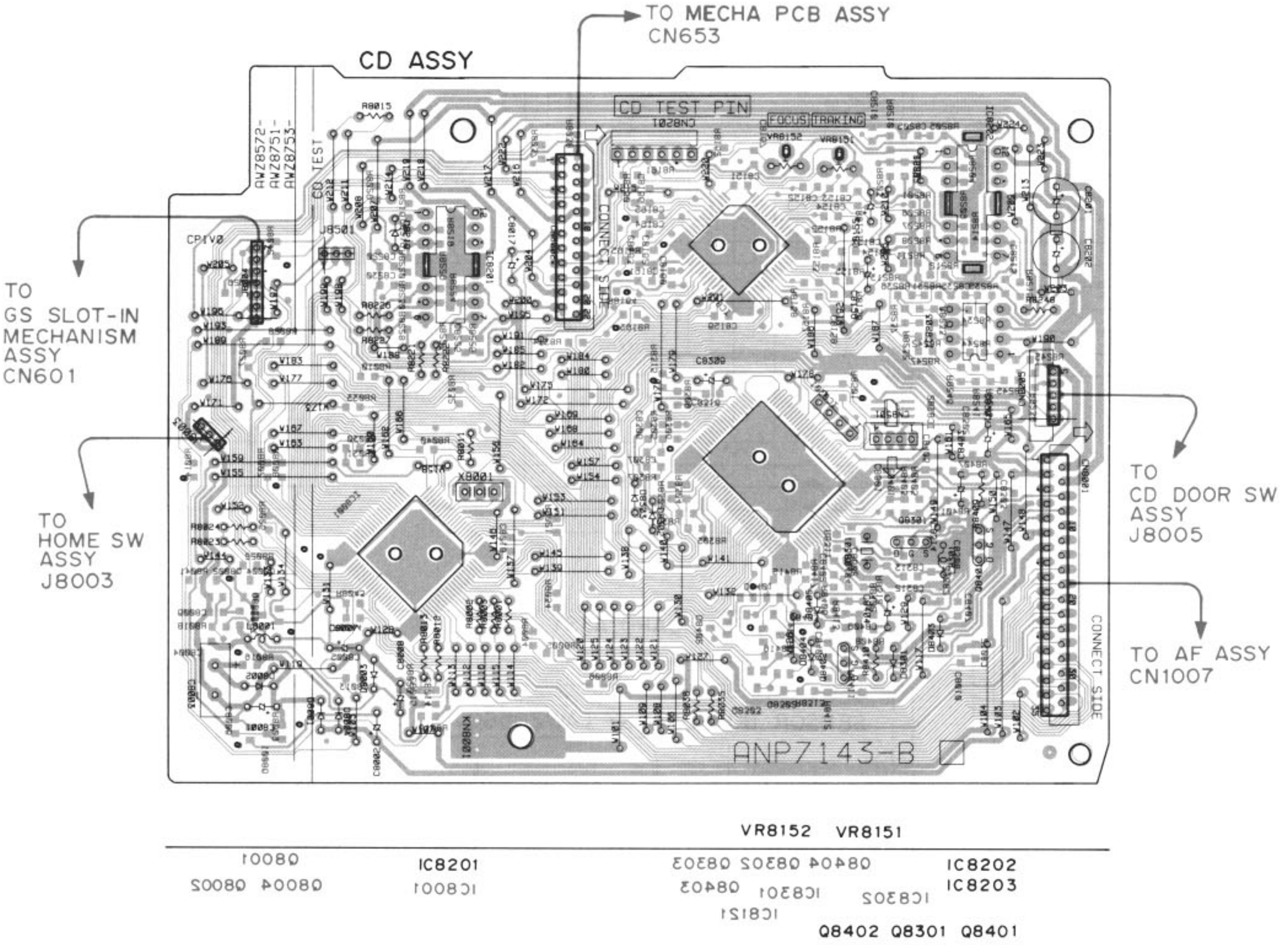

SCH-3
SENSOR PCB ASSY (AWZ7836)
J652 D20PWW0315E
D652 GP1S24
MOTOR PCB ASSY (AWZ7837)
GND
LED
PHTR
SELECT MOTOR AEA7005
LODING MOTOR ASSY AEA7006
M
(L)
SW PCB ASSY (AWZ7838)
S651 VSG1006
S652 VSG1006
CLMP
EJECT
J654 D20PWY0515E
J656 D20PWW0315E
CN654 52151-0510
MECHA PCB ASSY (AWZ8802)
R653 220
R651 ACN7012
R652 ACN7011
R653 DCN1062
R654 DCN1065
R651 56K
R652 10K
Q651
DTC124ES
R654 0
CN652 12FMZ-AST
ACTF-
ACTF+
ACTT-
ACTT+
GND
V+5
VC
LDON
FE
TE
NC
RF
(F)
(T)
(L)
(S)
(C)
INSD
SPDR
CADR
GND
CN651 173979-4
LODR
SEDR
OCNT
GND
LDON
TE
RF
FE
VC
GND
ACTT-
V+5
ACTF-
ACTF+
ACTT+
CLMP
EJCT
INSD
SPDR
CADR
TO CD ASSY CN8002 (→SCH-4)
CN653 SLEM22R-2
LO MECHANISM BOARD ASSY (AWX7035)
SENSOR BOARD ASSY (AWZ8560)
R604 6.8K
R605 6.8K
R606 6.8K
R607 6.8K
Q601 PS3322-TS
Q602 PS3322-TS
Q603 PS3322-TS
Q604 PS3322-TS
P1S1
V+5
P1S2
P1S4
P1S3
SLDR
GND
CN601 52151-0710
TO CD ASSY J8004 (→SCH-4)
J601 D20PW0315E
J602 D20PW0305E
R601 390
R602 390
D604 AN329
D601 AN329
D602 AN329
D603 AN329
LED BOARD ASSY (AWZ8561)
MOTOR BOARD ASSY (AWZ8744)
GS SLOT-IN MECHANISM ASSY (AXA7044)

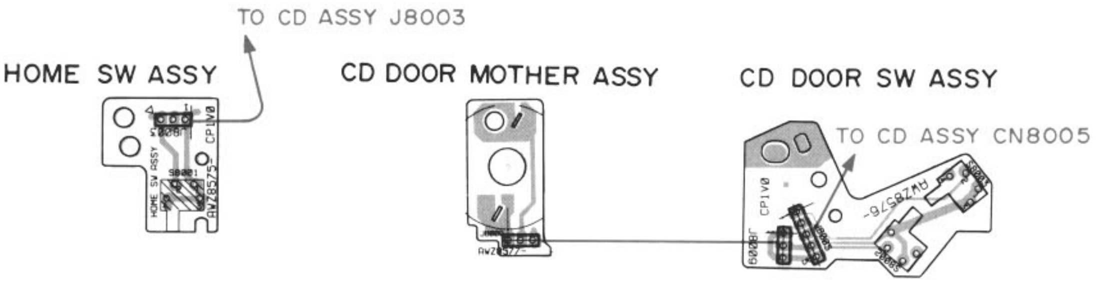
GS MECHANISM ASSEMBLIE
GS SLOT-IN MECHANISM ASSEMBLIE

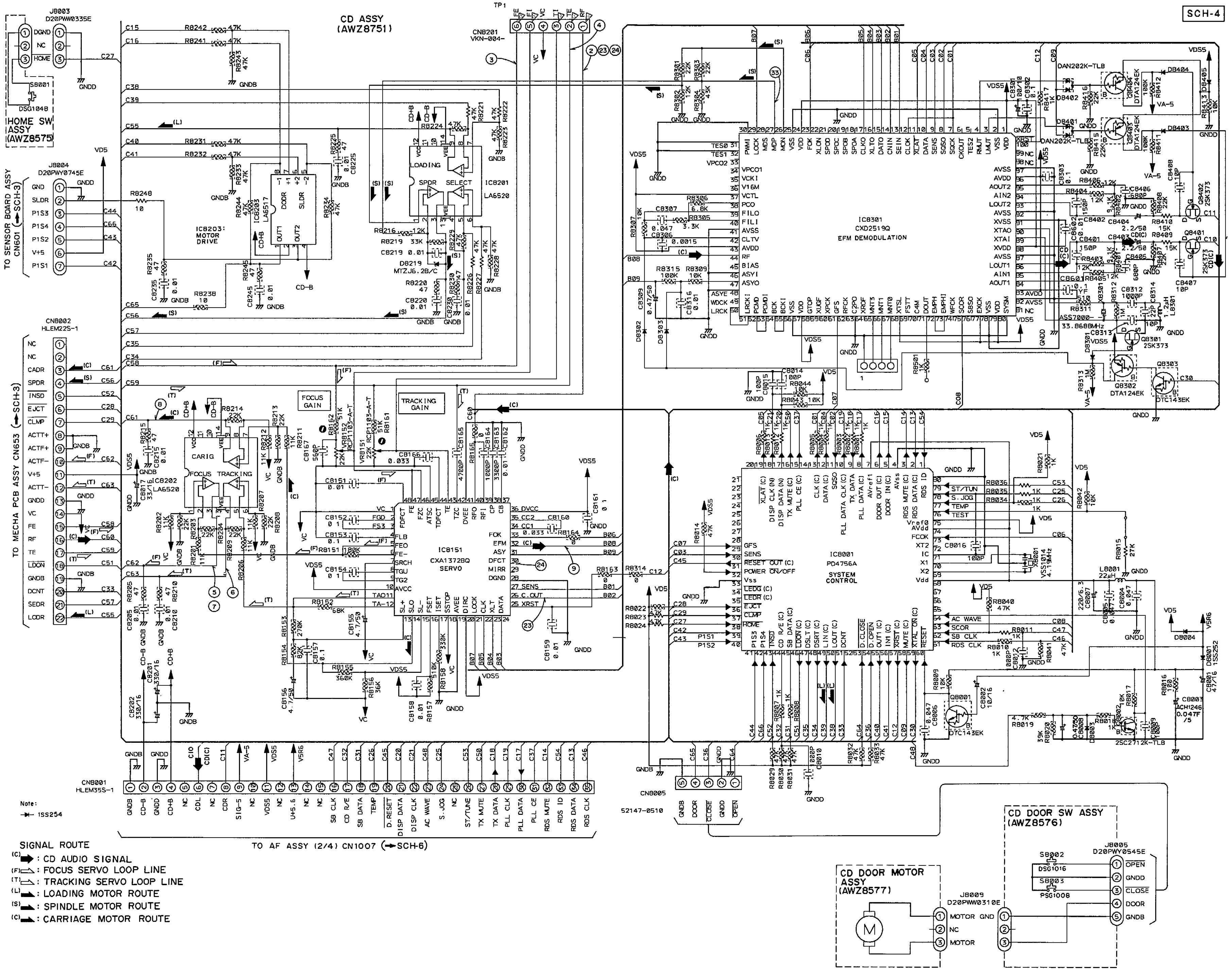
5.4 CD ASSY, CD DOOR SW ASSY, CD DOOR MOTOR ASSY AND HOME SW ASSY

- This diagram is viewed from the mounted parts side.
- The parts mounted on this PCB include all necessary parts for several destinations. For further infromation for respective destinations, be sure to check with the schematic diagram.

PCB-3


TO MECHA PCB ASSY CN653
CD ASSY
CD TEST PIN
FOCUS
TRAKING
CN8201
AWZ8572-
AWZ8751-
AWZ8753-
CD TEST
CP1V0
J8501
CONNECT SIDE
TO GS SLOT-IN MECHANISM ASSY CN601
TO HOME SW ASSY J8003
TO CD DOOR SW ASSY J8005
TO AF ASSY CN1007
X8001
ANP7143-B
VR8152
VR8151
Q8001
Q8004 Q8002
IC8201
IC8001
Q8404 Q8302 Q8303
Q8403
IC8301
IC8302
IC8121
IC8202
IC8203
Q8402 Q8301 Q8401


TO CD ASSY J8003
HOME SW ASSY
CD DOOR MOTHER ASSY
CD DOOR SW ASSY
TO CD ASSY CN8005
CP1V0
S8001
AWZ8575-
HOME SW ASSY
AWZ8577-
CP1V0
J8009
AWZ8576-

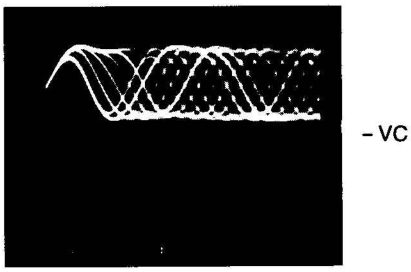

CD ASSY
(AWZ8751)
HOME SW
ASSY
(AWZ8575)
J8003
D20PWW0335E
J8004
D20PWY0745E
TO SENSOR BOARD ASSY CN601 (→SCH-3)
CN8002
HLEM22S-1
TO MECHA PCB ASSY CN653 (→SCH-3)
IC8203:
MOTOR
DRIVE
LA6517
IC8201
LA6520
LOADING
SPDR
SELECT
IC8202
LA6520
CARIG
FOCUS
TRACKING
FOCUS
GAIN
TRACKING
GAIN
IC8151
CXA1372BQ
SERVO
IC8301
CXD2519Q
EFM DEMODULATION
IC8001
PD4756A
SYSTEM
CONTROL
TP1
CN8201
VKN-004-
CN8001
HLEM35S-1
TO AF ASSY (2/4) CN1007 (→SCH-6)
CN8005
52147-0510
CD DOOR SW ASSY
(AWZ8576)
J8005
D20PWY0545E
CD DOOR MOTOR
ASSY
(AWZ8577)
J8009
D20PWW0310E
MOTOR GND
NC
MOTOR
OPEN
GNDD
CLOSE
DOOR
GNDB
Note:
1SS254
SIGNAL ROUTE
(C) : CD AUDIO SIGNAL
(F) : FOCUS SERVO LOOP LINE
(T) : TRACKING SERVO LOOP LINE
(L) : LOADING MOTOR ROUTE
(S) : SPINDLE MOTOR ROUTE
(C) : CARRIAGE MOTOR ROUTE

WAVEFORMS

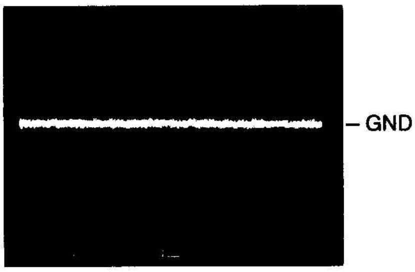
Note : The encircled numbers denote measuring points in the schematic diagram.

*1 FOCUS-IN : Press the key without loading a disc.

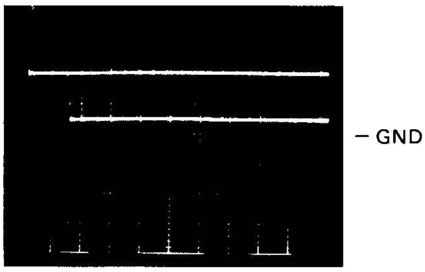
② TP1-Pin 1 : PLAY MODE
(RF)
500mV/div 500nsec/div



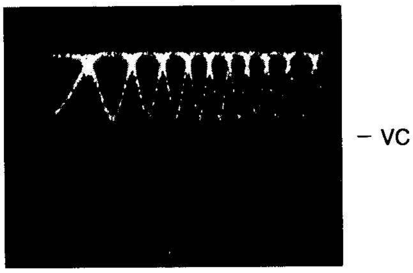
⑤ IC8202-Pin 3 : PLAY MODE
(FODR)
1V/div 1msec/div



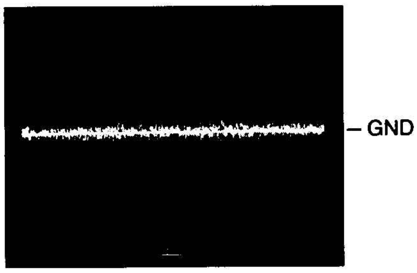
⑨ IC8151-Pin 32 : PLAY MODE
(EFM)
2V/div 500nsec/div



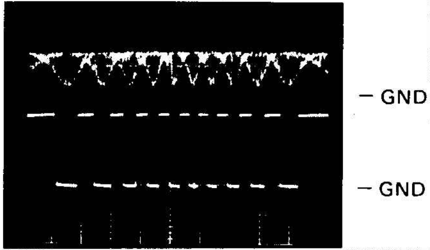
② TP1-Pin 1 : TRACK SEARCH MODE
(RF)
500mV/div 200μsec/div



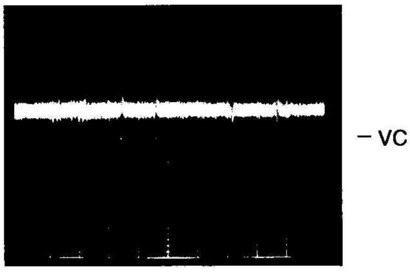
⑥ IC8202-Pin 4 : PLAY MODE
(TRDR)
500mV/div 1msec/div



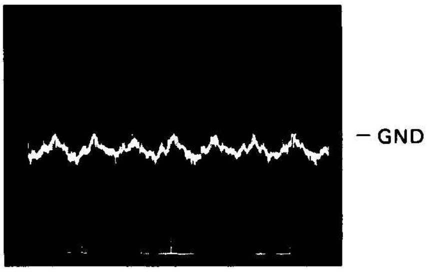
㉓ : TRACK SEARCH MODE
Upper : TP1-Pin 1 (RF) 1V/div
Lower : IC8151-Pin 26 (C.OUT)
2V/div 200μsec/div



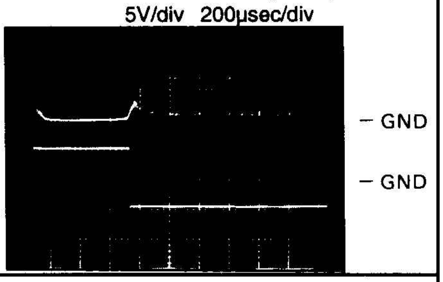
③ TP1-Pin 6 : PLAY MODE
(FOER)
100mV/div 10msec/div



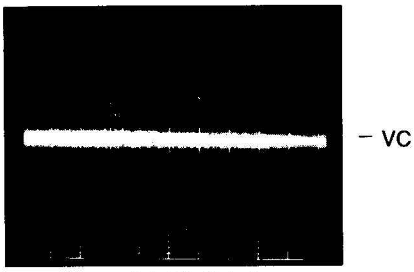
⑦ IC8202-Pin 3 : PLAY MODE
(SPDR)
1V/div 50msec/div



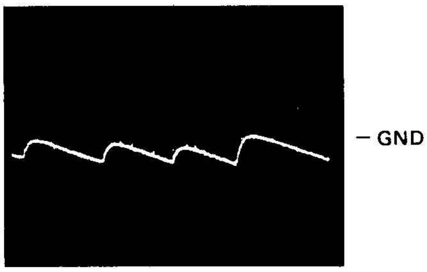
㉔ : PLAY MODE
Upper : TP1-Pin 1 (RF) 1V/div
Lower : IC8151-Pin 30 (DFCT)
5V/div 200μsec/div



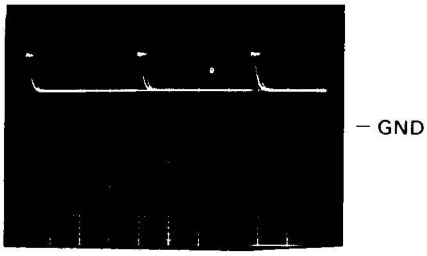
④ TP1-Pin 2 : PLAY MODE
(TRER)
1V/div 10msec/div



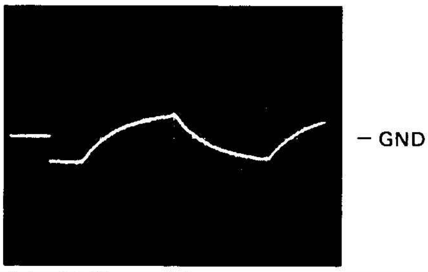
⑧ IC8202-Pin 9 : PLAY MODE
(CADR)
1V/div 2S/div



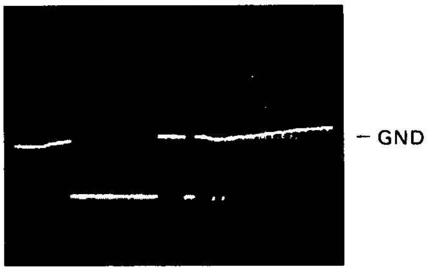
㉝ IC8301-Pin 26 : PLAY MODE
(MDP)
2V/div 2μsec/div



⑤ IC8202-Pin 3 : FOCUS-IN (*1) MODE
(FODR)
1V/div 200msec/div



⑧ IC8202-Pin 9 : TRACK SEARCH MODE
(CADR)
2V/div 200msec/div

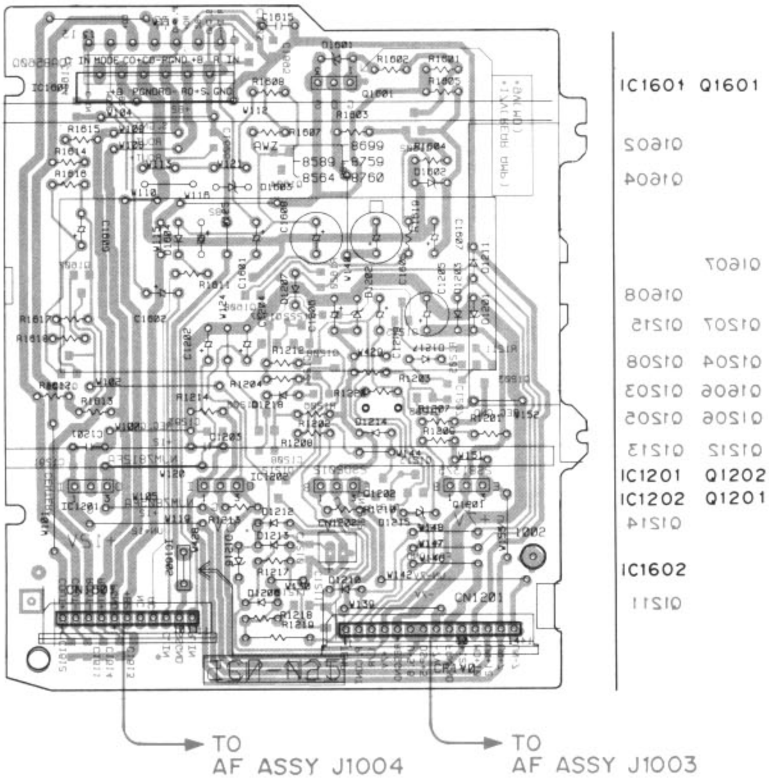


5.5 AF ASSY, REAR-AMP REG ASSY, FRONT AMP ASSY, HEADPHONE ASSY AND G.C ASSY

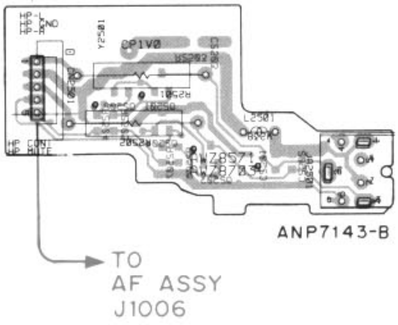
- This diagram is viewed from the mounted parts side.

PCB-4

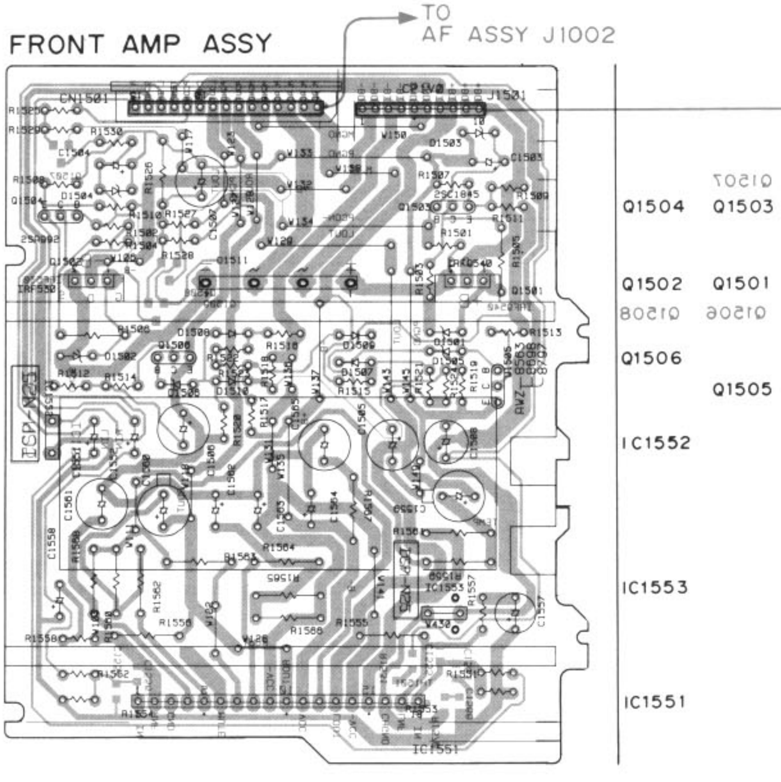
REAR−AMP REG ASSY


IC1601 Q1601
Q1602
Q1604
Q1607
Q1608
Q1207 Q1215
Q1204 Q1208
Q1606 Q1203
Q1206 Q1205
Q1212 Q1213
IC1201 Q1202
IC1202 Q1201
Q1214
IC1602
Q1211
CN1201
CN1601
IC1601
IC1201
IC1202
TO AF ASSY J1004
TO AF ASSY J1003

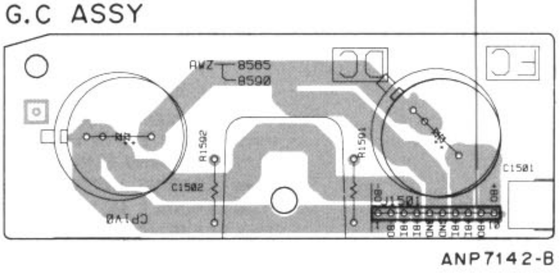
HEADPHONE ASSY


ANP7143-B
TO AF ASSY J1006
HP CONT
HP MUTE

FRONT AMP ASSY


TO AF ASSY J1002
CN1501
J1501
Q1507
Q1504 Q1503
Q1502 Q1501
Q1506 Q1508
Q1506
Q1505
IC1552
IC1553
IC1551

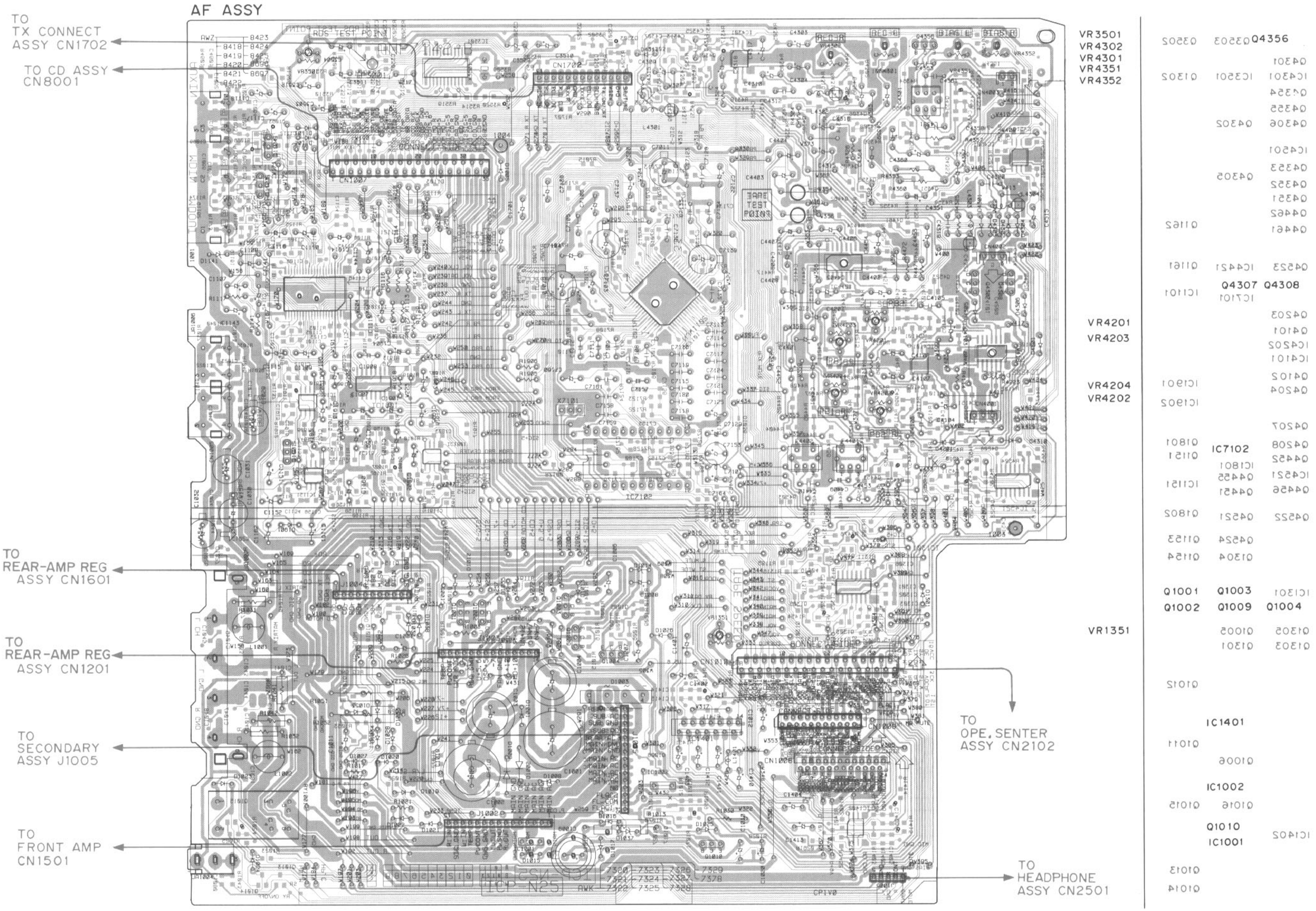
G.C ASSY


AWZ-8585
8590
R1502
R1501
C1502
C1501
J1501
CP1V0
ANP7142-B

- This diagram is viewed from the mounted parts side.

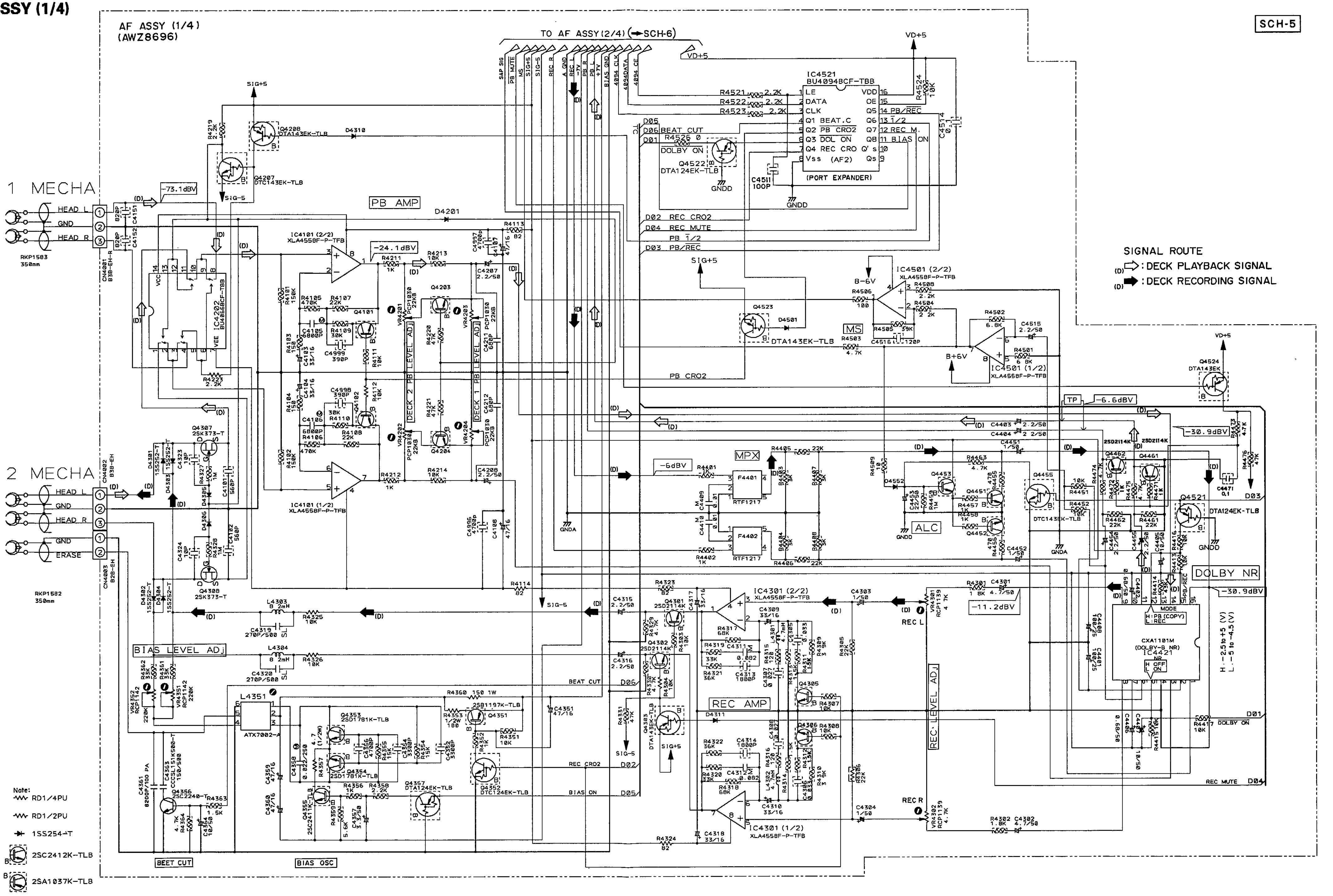
- The parts mounted on this PCB include all necessary parts for several destinations. For further infromation for respective destinations, be sure to check with the schematic diagram.

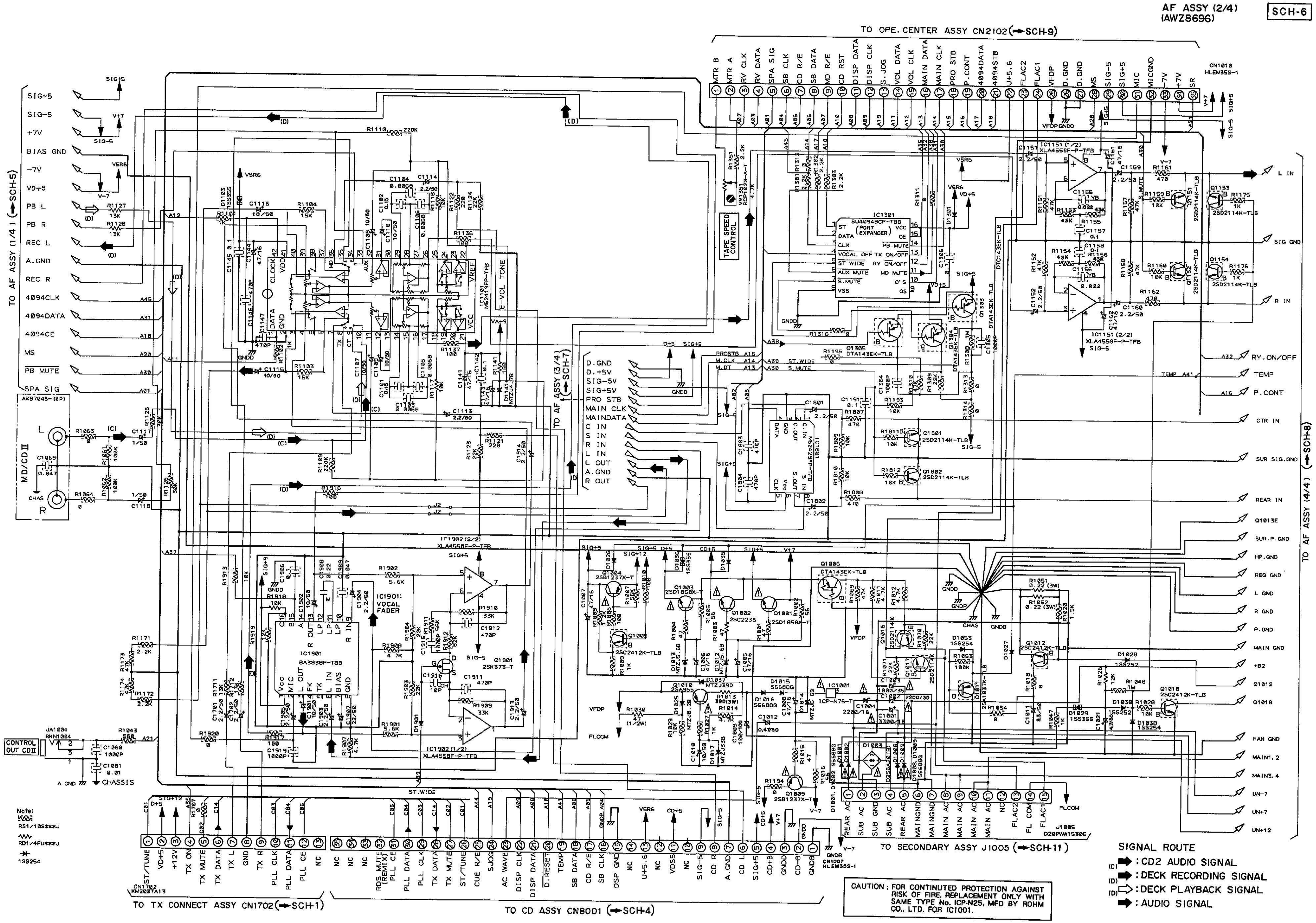
PCB-5


AF ASSY
TO TX CONNECT ASSY CN1702
TO CD ASSY CN8001
TO REAR-AMP REG ASSY CN1601
TO REAR-AMP REG ASSY CN1201
TO SECONDARY ASSY J1005
TO FRONT AMP CN1501
TO OPE. SENTER ASSY CN2102
TO HEADPHONE ASSY CN2501
VR3501
VR4302
VR4301
VR4351
VR4352
VR4201
VR4203
VR4204
VR4202
VR1351
Q4356
Q4307 Q4308
IC7102
Q1001 Q1003
Q1002 Q1009 Q1004
IC1401
IC1002
Q1010
IC1001

XR-P970F

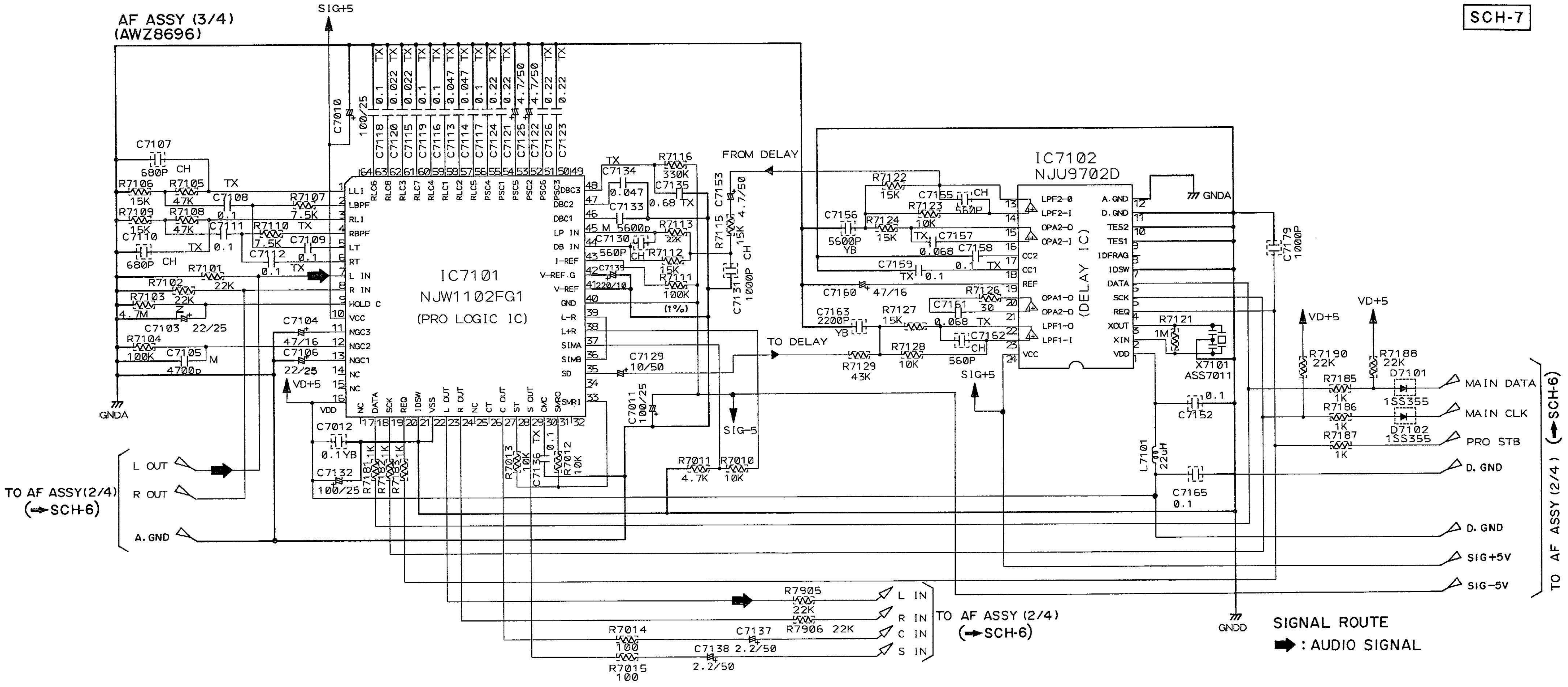
• AF ASSY (1/4)


SCH-5
AF ASSY (1/4)
(AWZ8696)
TO AF ASSY (2/4) (→SCH-6)
SAP SIG
PB MUTE
MS
SIG+5
SIG-5
REC R
A GND
REC L
-7V
PB R
PB L
+7V
BIAS GND
4094 CLK
4094DATA
4094 CE
VD+5
IC4521
BU4094BCF-TBB
(PORT EXPANDER)
R4521 2.2K
R4522 2.2K
R4523 2.2K
R4524 10K
C4514 0.1
LE
DATA
CLK
Q1 BEAT.C
Q2 PB CRO2
Q3 DOL ON
Q4 REC CRO
Vss (AF2)
VDD
OE
Q5 PB/REC
Q6 1/2
Q7 REC M.
Q8 BIAS ON
Q's
Qs
D05
D06 BEAT CUT
D01 DOLBY ON
R4526 0
Q4522
DTA124EK-TLB
C4511 100P
GNDD
D02 REC CRO2
D04 REC MUTE
PB 1/2
D03 PB/REC
SIG+5
Q4208
DTA143EK-TLB
D4310
Q4207
DTC143EK-TLB
R4219 2.2K
SIG-5
1 MECHA
HEAD L
GND
HEAD R
RKP1583
350mm
CN4001
B3B-EH-R
C4151
C4152
820P
-73.1dBV
PB AMP
D4201
R4113 82
IC4101 (2/2)
XLA4558F-P-TFB
-24.1dBV
R4211 1K
R4213 10K
C4207 2.2/50
C4997 4700P
C4107 47/16
IC4202
BU4066BCF-TBB
VCC
VEE
R4223 2.2K
R4105 470K
R4107 22K
R4101 150K
C4105 6800P
R4109 30K
Q4101
C4999 390P
R4111 10K
R4103 150
C4103 33/16
VR4201
PCP1030
22KB
Q4203
R4220 47K
VR4203
PCP1030 22KB
DECK 2 PB LEVEL ADJ
DECK 1 PB LEVEL ADJ
C4211 680P
C4212 680P
C4998 390P
30K
R4110
Q4102
R4112 10K
C4104 33/16
R4104 150
C4106
6800P
R4106
470K
R4108 22K
R4221 47K
VR4202
PCP1030 22KB
Q4204
VR4204
PCP1030 22KB
R4102 150K
IC4101 (1/2)
XLA4558F-P-TFB
R4212 1K
R4214 10K
C4208 2.2/50
C4996 4700P
C4108 47/16
Q4307
2SK373-T
D4301
1SS252-T
C4323 10P
R4327 1M
C4101 560P
D4303
D4305
D4306
C4324 10P
R4328 1M
C4102 560P
Q4308
2SK373-T
2 MECHA
CN4002
B3B-EH
HEAD L
GND
HEAD R
GND
ERASE
CN4003
B2B-EH
RKP1582
350mm
D4302
1SS252-T
D4304
1SS252-T
L4303
8.2mH
R4325 10K
C4319 270P/500
SL
L4304
8.2mH
R4326 10K
C4320 270P/500
R4114 82
BIAS LEVEL ADJ
R4362 33K
R4361 33K
VR4352 RCP1142 220K
VR4351 RCP1142 220K
L4351
ATX7002-A
R4360 150 1W
R4353 1/2W 180
2SB1197K-TLB
Q4351
C4351 47/16
R4351 10K
Q4353
2SD1781K-TLB
4.7 (1/2W)
C4356 4700P
R4355 15K
C4354 3300P
R4354 15K
C4352 3300P
C4358 0.022/250
R4357
Q4354
2SD1781K-TLB
R4356 1K
R4358 2.2K
Q4357
DTA124EK-TLB
Q4352
DTC124EK-TLB
C4359 47/16
C4360 47/16
Q4355
2SC2411K-TLB
R4359 10
5.6K
C4357 3.3/50
C4361 8200P/100 PA
C4362 CCCSL151K500-T 150/500
Q4356
2SC2240-T
R4363 1.5K
4.7K R4364
C4353 10/50
BEET CUT
BIAS OSC
SIG-5
C4315 2.2/50
R4323
Q4301
2SD2114K
C4317 33/16
R4329 4.7K
R4303 18K
Q4302
2SD2114K
C4316 2.2/50
R4330 4.7K
R4304 18K
BEAT CUT
D06
REC CRO2
D02
BIAS ON
D05
R4331 47K
SIG-5
Q4303
DTA143EK-TLB
SIG+5
D4311
IC4301 (2/2)
XLA4558F-P-TFB
C4309 33/16
R4317 68K
L4301 4.7mH
C4305 0.033
R4309 3.9K
R4319 33K
C4311
0.082
C4313 1800P
R4321 36K
R4315 120
C4307 0.027
R4313 15K
R4311 15K
Q4305
R4307 10K
REC AMP
Q4306
R4308 10K
R4322 36K
C4314 1800P
R4320 33K
C4312 0.082
R4318 68K
R4316 120
C4308 0.027
L4302 4.7mH
R4314 15K
R4312 15K
C4306 0.033
R4310 3.9K
C4310 33/16
IC4301 (1/2)
XLA4558F-P-TFB
C4318 33/16
R4324 82
R4305 22K
R4306 22K
C4303 1/50
C4304 1/50
REC L
REC R
VR4301 RCP1139 4.7K
VR4302 RCP1139 4.7K
REC LEVEL ADJ
R4301 1.8K
C4301 4.7/50
R4302 1.8K
C4302 4.7/50
-11.2dBV
B-6V
IC4501 (2/2)
XLA4558F-P-TFB
R4508 2.2K
R4504 2.2K
R4506 100
R4505 39K
C4516 120P
Q4523
DTA143EK-TLB
D4501
MS
R4503 4.7K
R4502 6.8K
C4515 2.2/50
B+6V
IC4501 (1/2)
XLA4558F-P-TFB
R4501 6.8K
PB CRO2
VD+5
Q4524
DTA143EK
TP
-6.6dBV
C4403 2.2/50
C4404 2.2/50
-30.9dBV
R4473 4.7K
R4476 4.7K
C4451 1/50
2SD2114K
Q4462
Q4461
C4471 0.1
D03
Q4521
DTA124EK-TLB
GNDD
MPX
-6dBV
R4401 1K
F4401
RTF1217
F4402
RTF1217
C4409
C4410
R4402 1K
R4405 22K
R4406 22K
R4403
R4407
R4404
R4408
GNDA
R4509 10
D4552
Q4453
R4463 4.7K
Q4451
R4455
R4457 1K
R4458 1K
Q4452
R4456
C4452 1/50
C4453 2.2/50
R4450 1M
ALC
GNDD
Q4455
DTC143EK-TLB
GNDA
R4451 10K
R4452 10K
R4474
R4475
R4471
R4462 22K
R4461 22K
C4454 2.2/50
C4455 2.2/50
R4416 10K
C4405 10/50
DOLBY NR
-30.9dBV
CXA1101M
(DOLBY-B NR)
IC4421
MODE
H:PB(COPY)
L:REC
NR
H:OFF
L:ON
H: -2.5 to +5 (V)
L: -5 to -4.5 (V)
R4417 10K
DOLBY ON
D01
R4415 10K
C4406 0.05
REC MUTE
D04
SIGNAL ROUTE
(D) : DECK PLAYBACK SIGNAL
(D) : DECK RECORDING SIGNAL
Note:
RD1/4PU
RD1/2PU
1SS254-T
2SC2412K-TLB
2SA1037K-TLB

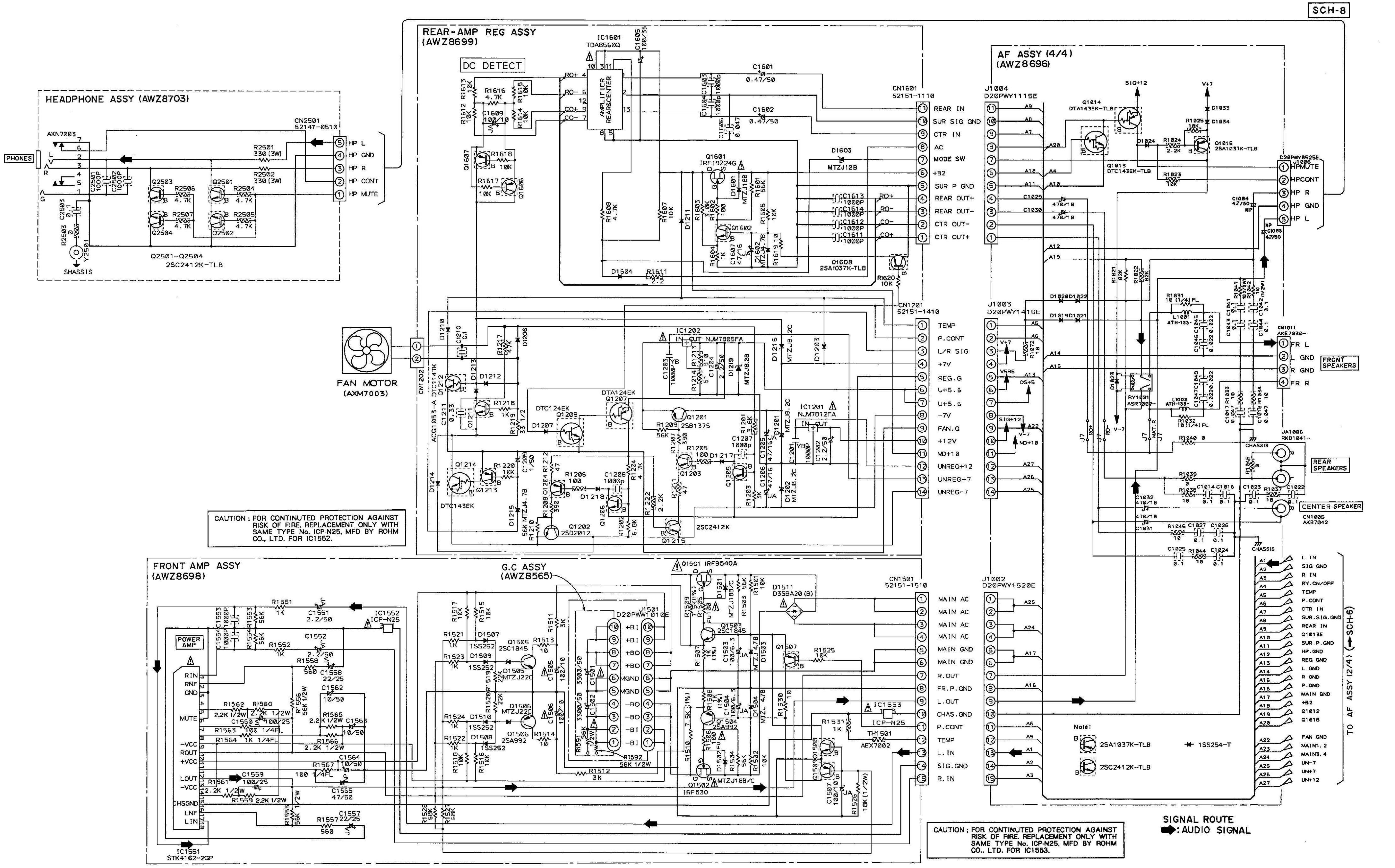

AF ASSY (2/4)
(AWZ8696)
SCH-6
TO OPE. CENTER ASSY CN2102 (→SCH-9)
MTR B
MTR A
RV CLK
RV DATA
SPA SIG
SB CLK
CD R/E
SB DATA
MD R/E
CD RST
DISP DATA
DISP CLK
S.JOG
VOL DATA
VOL CLK
MAIN DATA
MAIN CLK
PRO STB
P.CONT
4094DATA
4094STB
U+5.6
FLAC2
FLAC1
VFDP
D.GND
D.GND
MS
SIG-5
SIG+5
MIC
MICGND
-7V
+7V
SR
CN1010
HLEM35S-1
TO AF ASSY (1/4) (→SCH-5)
SIG+5
SIG-5
+7V
BIAS GND
-7V
VD+5
PB L
PB R
REC L
A.GND
REC R
4094CLK
4094DATA
4094CE
MS
PB MUTE
SPA SIG
AKB7043-(2P)
MD/CDII
L
R
CHAS
IC1101
M62419FP-TFB
E-VOL TONE
TAPE SPEED CONTROL
VR1351
RCP1020-A-T
IC1301
BU4094BCF-TBB
(PORT EXPANDER)
Q1303
DTC143EK-TLB
Q1304
DTA143EK-TLB
Q1305
DTA143EK-TLB
IC1151 (1/2)
XLA4558F-P-TFB
IC1151 (2/2)
XLA4558F-P-TFB
Q1151
Q1152
Q1153
Q1154
2SD2114K-TLB
L IN
SIG GND
R IN
RY.ON/OFF
TEMP
P.CONT
CTR IN
SUR SIG.GND
REAR IN
Q1013E
SUR.P.GND
HP.GND
REG GND
L GND
R GND
P.GND
MAIN GND
+B2
Q1012
Q1018
FAN GND
MAIN1, 2
MAIN3, 4
UN-7
UN+7
UN+12
TO AF ASSY (4/4) (→SCH-8)
TO AF ASSY (3/4) (→SCH-7)
D.GND
D.+5V
SIG-5V
SIG+5V
PRO STB
MAIN CLK
MAINDATA
C IN
S IN
R IN
L IN
L OUT
A.GND
R OUT
IC1801
M62420FP-TFB
Q1801
Q1802
2SD2114K-TLB
IC1902 (2/2)
XLA4558F-P-TFB
IC1902 (1/2)
XLA4558F-P-TFB
IC1901
BA3838F-TBB
IC1901: VOCAL FADER
Q1901
2SK373-T
Q1004
2SB1237X-T
Q1003
2SD1858X-T
Q1002
2SC2235
Q1001
2SD1858X-T
Q1005
2SC2412K-TLB
Q1006
DTA143EK-TLB
Q1010
2SA965
Q1009
2SB1237X-T
IC1001
ICP-N75-T
Q1012
2SC2412K-TLB
Q1018
2SC2412K-TLB
VFDP
FLCOM
JA1004
RKN1084
CONTROL OUT CDII
A GND
CHASSIS
CN1702
KM200TA13
TO TX CONNECT ASSY CN1702 (→SCH-1)
ST/TUNE
VD+5
+12V
TX ON
TX MUTE
TX DATA
TX L
GND
TX R
PLL CLK
PLL DATA
PLL CE
NC
TO CD ASSY CN8001 (→SCH-4)
RDS MUTE (REMIX)
PLL CE
PLL DATA
PLL CLK
TX DATA
TX MUTE
ST/TUNE
CUE R/E
SJOG
AC WAVE
DISP CLK
DISP DATA
D.RESET
TEMP
SB DATA
CD R/E
SB CLK
DSP GND
U+5.6
VDS5
SIG-5
CD R
A.GND
CD L
SIG+5
CD+B
GNDD
CD-B
GNDB
CN1007
HLEM35S-1
J1005
D20PWW1530E
TO SECONDARY ASSY J1005 (→SCH-11)
REAR AC
SUB AC
SUB GND
SUB AC
REAR AC
MAINGND
MAINGND
MAIN AC
MAIN AC
MAIN AC
MAIN AC
NC
FLAC2
FL COM
FLAC1
Note:
R51/10S***J
RD1/4PU***J
1SS254
SIGNAL ROUTE
(C) ➡ : CD2 AUDIO SIGNAL
(D) ➡ : DECK RECORDING SIGNAL
(D) ⇨ : DECK PLAYBACK SIGNAL
➡ : AUDIO SIGNAL

CAUTION : FOR CONTINUTED PROTECTION AGAINST RISK OF FIRE REPLACEMENT ONLY WITH SAME TYPE No. ICP-N25, MFD BY ROHM CO., LTD. FOR IC1001.

• AF ASSY (3/4)


SCH-7
AF ASSY (3/4)
(AWZ8696)
SIG+5
IC7101
NJW1102FG1
(PRO LOGIC IC)
IC7102
NJU9702D
(DELAY IC)
FROM DELAY
TO DELAY
GNDA
GNDD
VD+5
SIG-5
SIG+5
L OUT
R OUT
A.GND
TO AF ASSY(2/4)
(→SCH-6)
L IN
R IN
C IN
S IN
TO AF ASSY (2/4)
(→SCH-6)
MAIN DATA
MAIN CLK
PRO STB
D. GND
D. GND
SIG+5V
SIG-5V
TO AF ASSY (2/4) (→SCH-6)
D7101
1SS355
D7102
1SS355
X7101
ASS7011
L7101
22μH
R7905
22K
R7906 22K
R7014
100
R7015
100
C7137
C7138 2.2/50
2.2/50
SIGNAL ROUTE
➡ : AUDIO SIGNAL

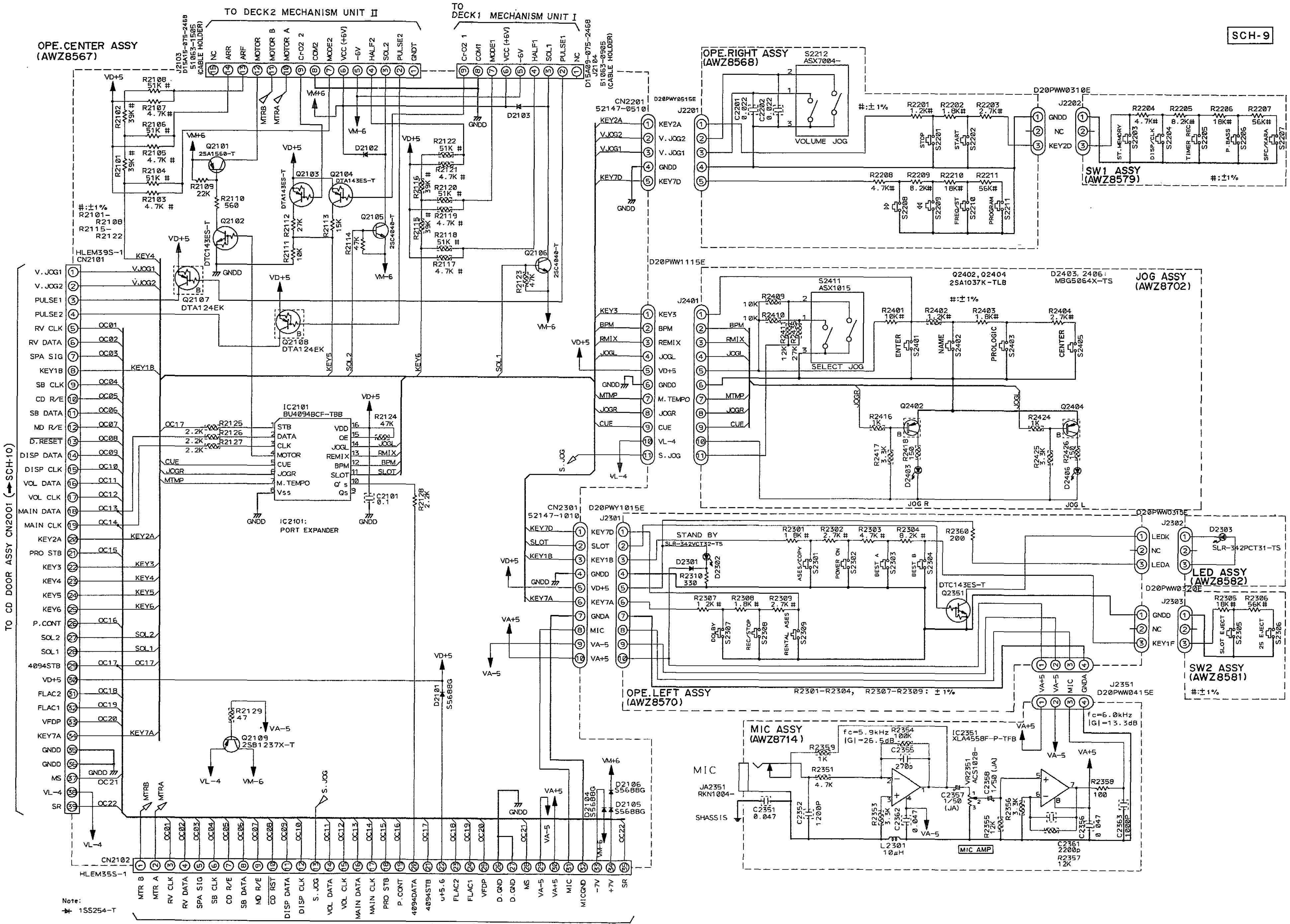
• AF ASSY (4/4), REAR-AMP REG ASSY, FRONT AMP ASSY, HEADPHONE ASSY AND G.C ASSY


SCH-8
REAR-AMP REG ASSY (AWZ8699)
DC DETECT
IC1601 TDA8560Q
AMPLIFIER REAR&CENTER
CN1601 52151-1110
REAR IN
SUR SIG GND
CTR IN
AC
MODE SW
+B2
SUR P GND
REAR OUT+
REAR OUT-
CTR OUT-
CTR OUT+
CN1201 52151-1410
TEMP
P.CONT
L/R SIG
+7V
REG.G
U+5.6
U+5.6
-7V
FAN.G
+12V
MD+10
UNREG+12
UNREG+7
UNREG-7
IC1202 NJM7805FA
IC1201 NJM7812FA
HEADPHONE ASSY (AWZ8703)
CN2501 52147-0510
HP L
HP GND
HP R
HP CONT
HP MUTE
PHONES
AKN7003
Q2501-Q2504 2SC2412K-TLB
SHASSIS
FAN MOTOR (AXM7003)
CN1202
AF ASSY (4/4) (AWZ8696)
J1004 D20PWY1115E
J1003 D20PWY1415E
J1002 D20PWY1520E
SIG+12
V+7
CN1011 AKE7030-
FR L
L GND
R GND
FR R
FRONT SPEAKERS
JA1006 RKB1041-
CHASSIS
REAR SPEAKERS
CENTER SPEAKER
CN1005 AKB7042
RY1001 ASR7007
FRONT AMP ASSY (AWZ8698)
POWER AMP
IC1551 STK4162-2GP
IC1552 ICP-N25
RIN
RNF
GND
MUTE
-VCC
ROUT
+VCC
LOUT
-VCC
CHSGND
LNF
LIN
G.C ASSY (AWZ8565)
J1501 D20PWW1010E
Q1501 IRF9540A
Q1502 IRF530
D1511 D3SBA20(B)
IC1553 ICP-N25
TH1501 AEX7002
CN1501 52151-1510
MAIN AC
MAIN AC
MAIN AC
MAIN AC
MAIN GND
MAIN GND
R.OUT
FR.P.GND
L.OUT
CHAS.GND
P.CONT
TEMP
L.IN
SIG.GND
R.IN
L IN
SIG GND
R IN
RY.ON/OFF
TEMP
P.CONT
CTR IN
SUR.SIG.GND
REAR IN
Q1013E
SUR.P.GND
HP.GND
REG GND
L GND
R GND
P.GND
MAIN GND
+B2
Q1012
Q1018
FAN GND
MAIN1, 2
MAIN3, 4
UN-7
UN+7
UN+12
TO AF ASSY (2/4) (SCH-6)
Note:
2SA1037K-TLB
2SC2412K-TLB
1SS254-T
SIGNAL ROUTE
: AUDIO SIGNAL

CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACEMENT ONLY WITH SAME TYPE NO. ICP-N25, MFD BY ROHM CO., LTD. FOR IC1552.

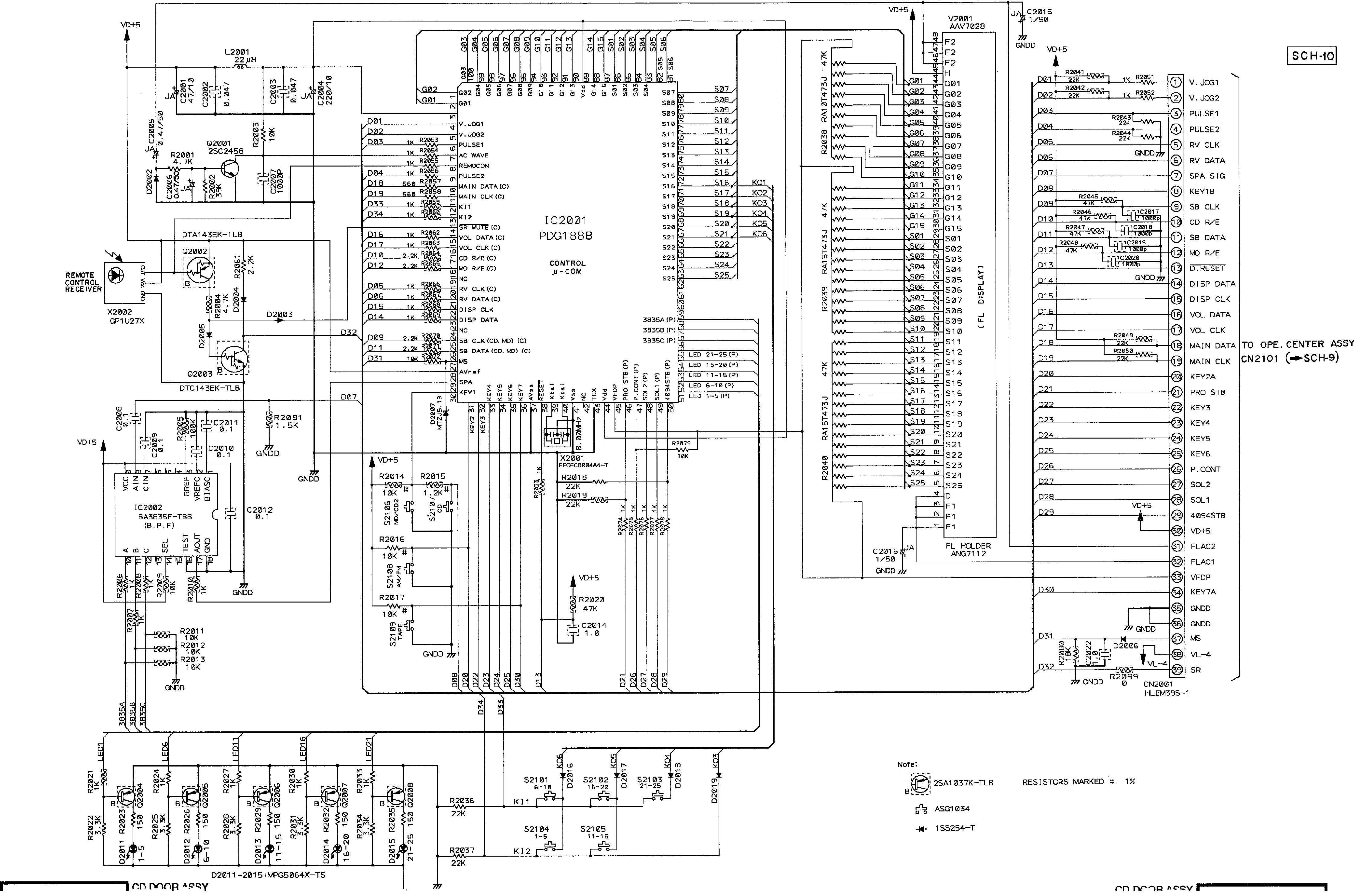
CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACEMENT ONLY WITH SAME TYPE NO. ICP-N25, MFD BY ROHM CO., LTD. FOR IC1553.

5.6 OPE. CENTER ASSY, OPE. RIGHT ASSY, OPE. LEFT ASSY, JOG ASSY, MIC ASSY, SW1 ASSY, SW2 ASSY AND LED ASSY

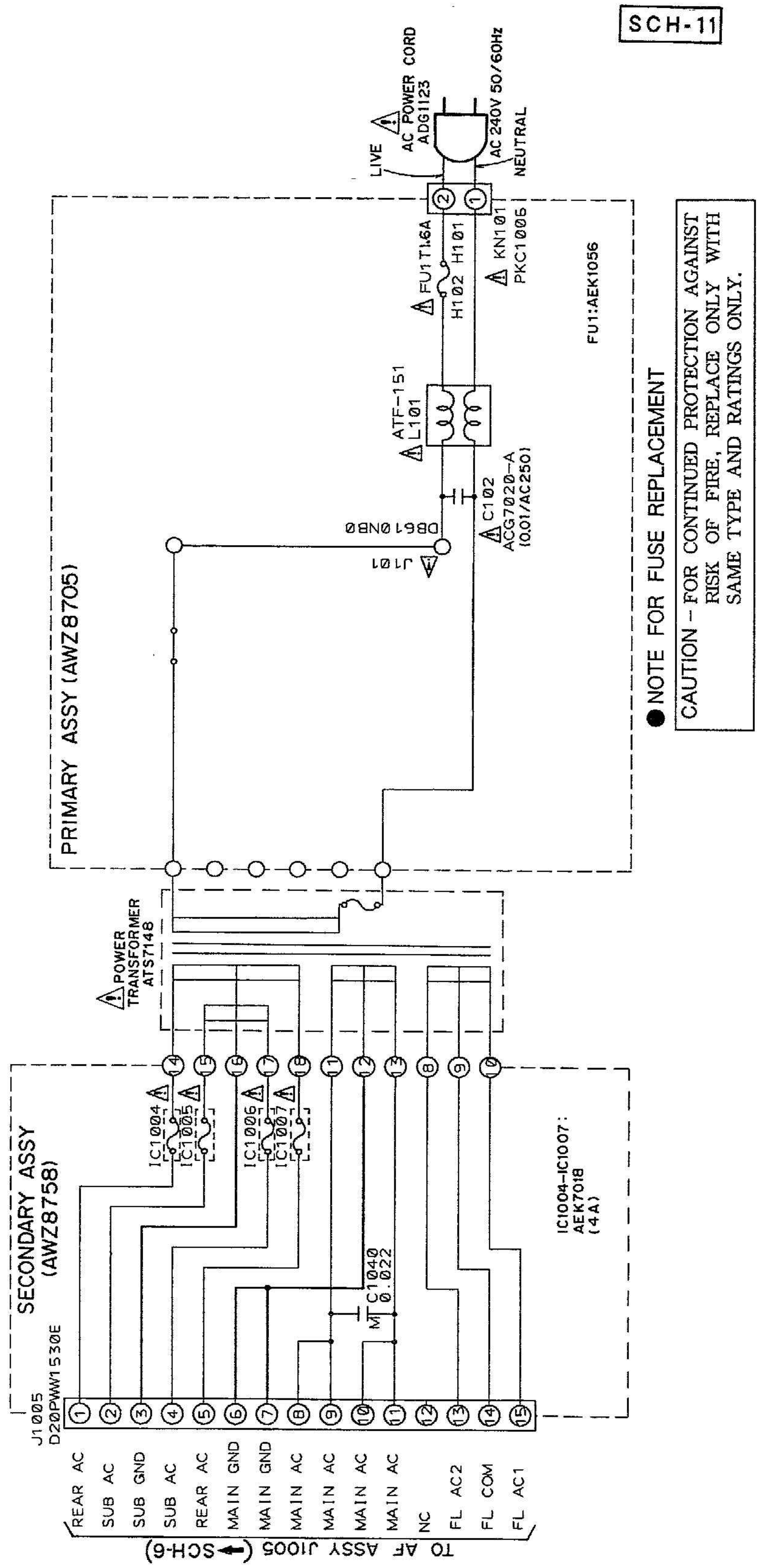

SCH-9
TO DECK2 MECHANISM UNIT II
TO DECK1 MECHANISM UNIT I
OPE.CENTER ASSY (AWZ8567)
J2103 D15A15-075-2468 51063-1505 (CABLE HOLDER)
J2104 D15A05-075-2468 51063-0505 (CABLE HOLDER)
NC ARR ARF MOTOR MOTOR B MOTOR A CrO2 2 COM2 MODE2 VCC (+6V) -6V HALF2 SOL2 PULSE2 GNDT
CrO2 1 COM1 MODE1 VCC (+6V) -6V HALF1 SOL1 PULSE1 NC
Q2101 2SA1560-T
Q2102 DTC143ES-T
Q2103 DTA143ES-T
Q2104 DTA143ES-T
Q2105 2SC4040-T
Q2106 2SC4040-T
Q2107 DTA124EK
Q2108 DTA124EK
Q2109 2SB1237X-T
D2102 D2103
#:±1% R2101–R2108 R2115–R2122
HLEM39S-1 CN2101
IC2101 BU4094BCF-TBB
STB DATA CLK MOTOR CUE JOGR M.TEMPO Vss VDD OE JOGL REMIX BPM SLOT Q's Qs
IC2101: PORT EXPANDER
C2101 0.1
D2101 S5688G
D2104 S5688G
D2105 S5688G
D2106 S5688G
TO CD DOOR ASSY CN2001 (→SCH-10)
V.JOG1 V.JOG2 PULSE1 PULSE2 RV CLK RV DATA SPA SIG KEY1B SB CLK CD R/E SB DATA MD R/E D.RESET DISP DATA DISP CLK VOL DATA VOL CLK MAIN DATA MAIN CLK KEY2A PRO STB KEY3 KEY4 KEY5 KEY6 P.CONT SOL2 SOL1 4094STB VD+5 FLAC2 FLAC1 VFDP KEY7A GNDD GNDD MS VL-4 SR
CN2102 HLEM35S-1
MTR B MTR A RV CLK RV DATA SPA SIG SB CLK CD R/E SB DATA MD R/E CD RST DISP DATA DISP CLK S.JOG VOL DATA VOL CLK MAIN DATA MAIN CLK PRO STB P.CONT 4094DATA 4094STB u+5.6 FLAC2 FLAC1 VFDP D.GND D.GND MS VA-5 VA+5 MIC MICGND -7V +7V SR
TO AF ASSY (2/4) CN1010 (→SCH-6)
Note:
1SS254-T
ASG1034-A-T
#:±1%
CN2201 52147-0510
D20PWY0515E
J2201
KEY2A V.JOG2 V.JOG1 GNDD KEY7D
OPE.RIGHT ASSY (AWZ8568)
S2212 ASX7004-
VOLUME JOG
C2201 0.022 C2202 0.022
#:±1%
R2201 1.2K# R2202 1.8K# R2203 2.7K#
STOP S2201 START S2202
R2208 4.7K# R2209 8.2K# R2210 18K# R2211 56K#
S2208 S2209 FREQ/ST S2210 PROGRAM S2211
D20PWW0310E
J2202 GNDD NC KEY2D
R2204 4.7K# R2205 8.2K# R2206 18K# R2207 56K#
ST.MEMORY S2203 DISP/CLK S2204 TIMER REC S2205 P.BASS S2206 SFC/KARA S2207
SW1 ASSY (AWZ8579)
#:±1%
D20PWW1115E
J2401
KEY3 BPM REMIX JOGL VD+5 GNDD M.TEMPO JOGR CUE VL-4 S.JOG
JOG ASSY (AWZ8702)
S2411 ASX1015
SELECT JOG
Q2402, Q2404 2SA1037K-TLB
D2403, 2406: MBG5064X-TS
#:±1%
R2401 10K# R2402 1.2K# R2403 1.8K# R2404 2.7K#
ENTER S2401 NAME S2402 PROLOGIC S2403 CENTER S2405
Q2402 Q2404
R2416 R2417 3.3K R2418 150 D2403 R2424 R2425 3.3K R2426 150 D2406
JOG R JOG L
CN2301 52147-1010
D20PWY1015E
J2301
KEY7D SLOT KEY1B GNDD VD+5 KEY7A GNDA MIC VA-5 VA+5
STAND BY
SLR-342VCT32-TS
D2301 D2302
R2310 330
R2301 1.8K# R2302 2.7K# R2303 4.7K# R2304 8.2K# R2360 200
ASES/COPY S2301 POWER ON S2302 BEST A S2303 BEST B S2304
R2307 1.2K# R2308 1.8K# R2309 2.7K#
DOLBY S2307 REC/STOP S2308 RENTAL ASES S2309
DTC143ES-T Q2351
OPE.LEFT ASSY (AWZ8570)
R2301–R2304, R2307–R2309: ±1%
D20PWW0310E
J2302 LEDK NC LEDA
D2303 SLR-342PCT31-TS
LED ASSY (AWZ8582)
D20PWW0320E
J2303 GNDD NC KEY1F
R2305 18K# R2306 56K#
SLOT EJECT S2305 2S EJECT S2306
SW2 ASSY (AWZ8581)
#:±1%
J2351 D20PWW0415E
VA+5 VA-5 MIC GNDA
MIC ASSY (AWZ8714)
fc=5.9kHz |G|=26.5dB
fc=6.0kHz |G|=13.3dB
IC2351 XLA4558F-P-TFB
MIC
JA2351 RKN1004-
SHASSIS
R2359 1K R2351 4.7K R2354 100K C2355 270p
VR2351 ACS1028-
C2351 0.047 C2352 1200P C2362 0.047 R2353
L2301 10μH
C2357 1/50 (JA) C2358 1/50 (JA)
R2355 12K R2356 3K R2358 100 C2356 0.047 C2363 1000P
C2361 2200p R2357 12K
MIC AMP

XR-P970F

CD DOOR ASSY
(AWZ8700)


SCH-10
IC2001
PDG188B
CONTROL
µ-COM
IC2002
BA3835F-TBB
(B.P.F)
V2001
AAV7028
(FL DISPLAY)
FL HOLDER
ANG7112
CN2001
HLEM39S-1
TO OPE. CENTER ASSY
CN2101 (→SCH-9)
REMOTE
CONTROL
RECEIVER
X2002
GP1U27X
X2001
EFOEC8004A4-T
8.00MHz
Q2001
2SC2458
Q2002
DTA143EK-TLB
Q2003
DTC143EK-TLB
L2001
22µH
C2001 47/10
C2002 0.047
C2003 0.047
C2004 220/10
C2005 0.47/50
C2006 0.47/50
C2007 1000P
C2008 0.1
C2009 0.1
C2010 0.1
C2011 0.1
C2012 0.1
C2014 1.0
C2015 1/50
C2016 1/50
C2017 1000p
C2018 1000p
C2019 1000p
C2020 1000p
C2022 1.0
R2001 4.7K
R2002 39K
R2003 10K
R2004 4.7K
R2005 100K
R2051 2.2K
R2081 1.5K
R2011 10K
R2012 10K
R2013 10K
R2014 10K
R2015 1.2K
R2016 10K
R2017 10K
R2018 22K
R2019 22K
R2020 47K
R2036 22K
R2037 22K
R2079 10K
R2080 10K
R2099 0
RA10T473J 47K
RA15T473J 47K
R2038
R2039
R2040
D2002
D2003
D2004
D2005
D2006
D2007 MTZJ5.1B
S2101 6-10
S2102 16-20
S2103 21-25
S2104 1-5
S2105 11-15
S2106 MD/CD2
S2107 CD
S2108 AM/FM
S2109 TAPE
D2011-2015:MPG5064X-TS
Q2004
Q2005
Q2006
Q2007
Q2008
D2016
D2017
D2018
D2019
KI1
KI2
KO1
KO2
KO3
KO4
KO5
KO6
3835A
3835B
3835C
LED1
LED6
LED11
LED16
LED21
VD+5
GNDD
VL-4
JA
V.JOG1
V.JOG2
PULSE1
AC WAVE
REMOCON
PULSE2
MAIN DATA (C)
MAIN CLK (C)
KI1
KI2
SR MUTE (C)
VOL DATA (C)
VOL CLK (C)
CD R/E (C)
MD R/E (C)
NC
RV CLK (C)
RV DATA (C)
DISP CLK
DISP DATA
NC
SB CLK (CD, MD) (C)
SB DATA (CD, MD) (C)
MS
AVref
SPA
KEY1
KEY2
KEY3
KEY4
KEY5
KEY6
KEY7
AVss
RESET
Xtal
Xtal
Vss
NC
TEX
Vdd
VFDP
PRO STB (P)
P.CONT (P)
SOL2 (P)
SOL1 (P)
4094STB (P)
3835A (P)
3835B (P)
3835C (P)
LED 21-25 (P)
LED 16-20 (P)
LED 11-15 (P)
LED 6-10 (P)
LED 1-5 (P)
V.JOG1
V.JOG2
PULSE1
PULSE2
RV CLK
RV DATA
SPA SIG
KEY1B
SB CLK
CD R/E
SB DATA
MD R/E
D.RESET
DISP DATA
DISP CLK
VOL DATA
VOL CLK
MAIN DATA
MAIN CLK
KEY2A
PRO STB
KEY3
KEY4
KEY5
KEY6
P.CONT
SOL2
SOL1
4094STB
VD+5
FLAC2
FLAC1
VFDP
KEY7A
GNDD
GNDD
MS
VL-4
SR
Note:
2SA1037K-TLB
ASG1034
1SS254-T
RESISTORS MARKED #. 1%
CD DOOR ASSY

5.8 PRIMARY ASSY AND SECONDARY ASSY


SCH-11
AC POWER CORD
ADG1123
LIVE
AC 240V 50/60Hz
NEUTRAL
PRIMARY ASSY (AWZ8705)
FU1 T1.6A
H102 H101
KN101
PKC1006
FU1:AEK1056
ATF-151
L101
C102
ACG7020-A
(0.01/AC250)
DB610NB0
J101
POWER TRANSFORMER
ATS7148
SECONDARY ASSY
(AWZ8758)
IC1004
IC1005
IC1006
IC1007
IC1004–IC1007:
AEK7018
(4A)
C1040
0.022
M
J1005
D20PWW1530E
REAR AC
SUB AC
SUB GND
SUB AC
REAR AC
MAIN GND
MAIN GND
MAIN AC
MAIN AC
MAIN AC
MAIN AC
NC
FL AC2
FL COM
FL AC1
TO AF ASSY J1005 (→SCH-6)

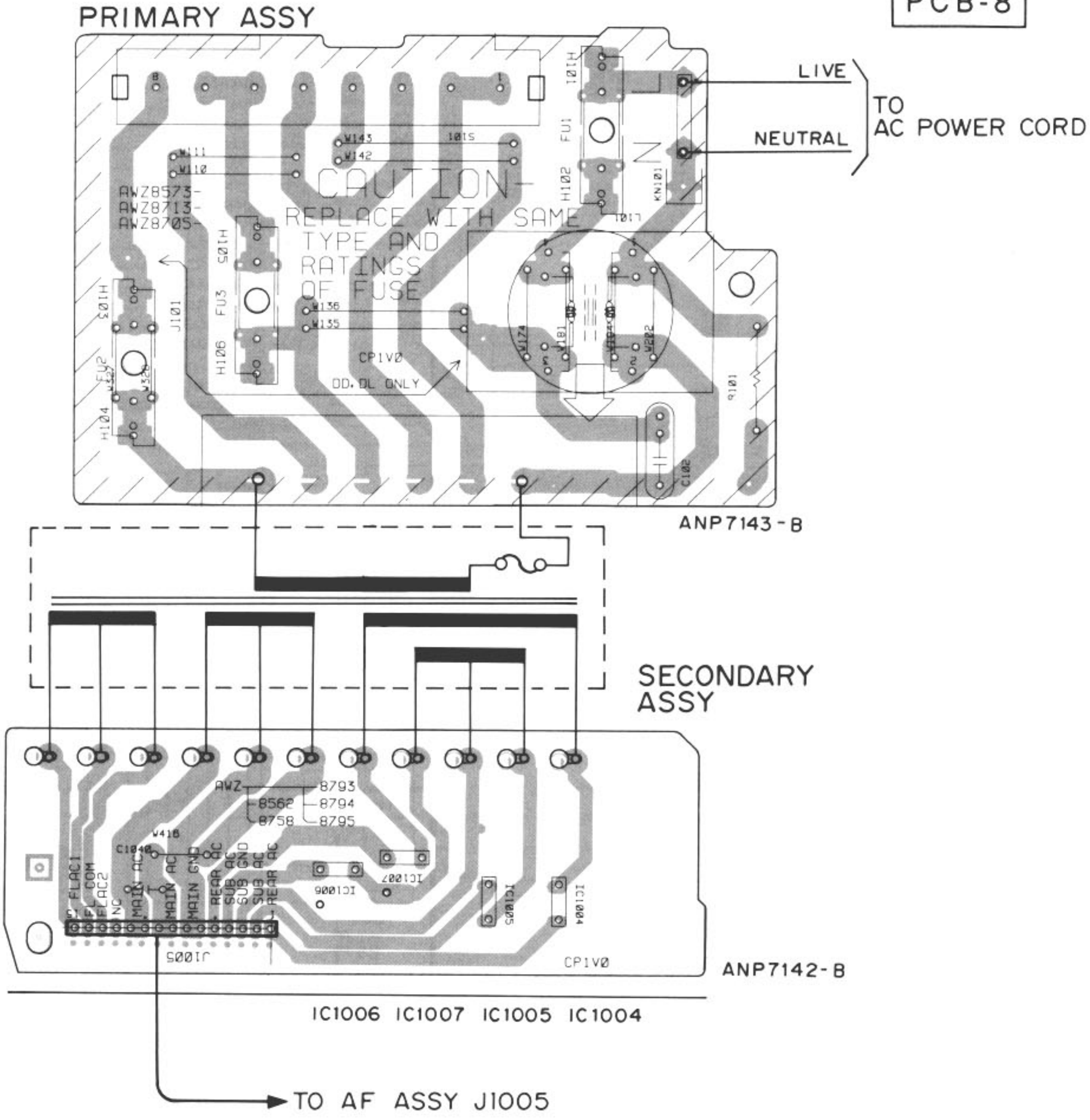
● NOTE FOR FUSE REPLACEMENT

CAUTION – FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE AND RATINGS ONLY.

- This diagram is viewed from the mounted parts side.

- The parts mounted on this PCB include all necessary parts for several destinations. For further infromation for respective destinations, be sure to check with the schematic diagram.

PCB-8


PRIMARY ASSY
LIVE
NEUTRAL
TO AC POWER CORD
CAUTION
REPLACE WITH SAME
TYPE AND
RATINGS
OF FUSE
AWZ8573-
AWZ8713-
AWZ8705-
FU1
FU2
FU3
H101
H102
H103
H104
H105
H106
J101
KN101
W110
W111
W135
W136
W142
W143
W174
W181
W202
W320
W321
R101
C102
CP1V0
OD, DL ONLY
ANP7143-B
SECONDARY ASSY
AWZ
8562
8758
8793
8794
8795
W416
C1040
FLAC1
FL COM
FLAC2
NC
MAIN AC
MAIN AC
MAIN GND
REAR AC
SUB AC
SUB GND
SUB AC
REAR AC
IC1006
IC1007
IC1005
IC1004
J1005
CP1V0
ANP7142-B
IC1006 IC1007 IC1005 IC1004
TO AF ASSY J1005

6. PCB PARTS LIST

NOTES:

- *Parts marked by "NSP"are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by " ⊙ "are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47K ohm (tolerance is shown by J=5%, and K=10%).

560 Ω → 56 × 10^1 → 561 ······························ RD1/4PU $\boxed{5}\boxed{6}\boxed{1}$ *J*
47 kΩ → 47 × 10^3 → 473 ······························ RD1/4PU $\boxed{4}\boxed{7}\boxed{3}$ *J*
0.5 Ω → 0R5 ······························ RN2H $\boxed{0}\boxed{R}\boxed{5}$ *K*
1 Ω → 1R0 ······························ RS1P $\boxed{1}\boxed{R}\boxed{0}$ *K*

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62 kΩ → 562 × 10^1 → 5621 ······························ RN1/4PC $\boxed{5}\boxed{6}\boxed{2}\boxed{1}$ *F*

LIST OF ASSEMBLIES

Mark	No.	Description	Parts No.
		FM/AM TUNER MODULE	AXQ7051
NSP		MAIN ASSY	AWK7326
		├─ G. C ASSY	AWZ8565
		├─ AF ASSY	AWZ8696
		├─ FRONT AMP ASSY	AWZ8698
		├─ REAR-AMP REG ASSY	AWZ8699
		└─ SECONDARY ASSY	AWZ8758
NSP		COMPLEX ASSY	AWM7233
		├─ OPE. CENTER ASSY	AWZ8567
		├─ OPE. RIGHT ASSY	AWZ8568
		├─ OPE. LEFT ASSY	AWZ8570
NSP		├─ HOME SW ASSY	AWZ8575
NSP		├─ CD DOOR SW ASSY	AWZ8576
NSP		├─ CD DOOR MOTOR ASSY	AWZ8577
NSP		├─ SW1 ASSY	AWZ8579
		├─ SW2 ASSSY	AWZ8581
NSP		├─ LED ASSY	AWZ8582
		├─ TX CONNECT ASSY	AWZ8591
		├─ CD DOOR ASSY	AWZ8700
		├─ JOG ASSY	AWZ8702
		├─ HEADPHONE ASSY	AWZ8703
		├─ PRIMARY ASSY	AWZ8705
		├─ MIC ASSY	AWZ8714
		└─ CD ASSY	AWZ8751
NSP		GS MECHANISM ASSY	AXA7047
NSP		├─ LO MECHNISM BOARD ASSY	AWX7035
NSP		│ ├─ MECHA PCB ASSY	AWZ8802
NSP		│ ├─ SENSOR PCB ASSY	AWZ7836
NSP		│ ├─ MOTOR PCB ASSY	AWZ7837
NSP		│ └─ SW PCB ASSY	AWZ7838
NSP		└─ SERVO MECHANISM ASSY GM	AXA7028
		└─ MECHANISM BOARD ASSY	PWX1192
NSP		GS SLOT-IN MECHANISM ASSY	AXA7044
NSP		└─ SL MECHANISM ASSY	AWX7031
NSP		├─ SENSOR BOARD ASSY	AWZ8560
NSP		├─ LED BOARD ASSY	AWZ8561
NSP		└─ MOTOR BOARD ASSY	AWZ8744

FM/AM TUNER MODULE

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC6201		LA1832ML
	IC6202		LC72131MD
	Q6402		2SC2223
	Q6203		2SC2705
	Q6201, Q6202		2SC2712
	Q6214, Q6403		2SC2714
	Q6404		2SK302
	Q6401		3SK194
	Q6204		DTA124ES
	Q6205		DTC124EK
	D6202		1SS254
	D6401, D6402		1T363

COILS AND FILTERS

Mark	No.	Description	Parts No.
	L6404		ATC1003
	L6401		ATC1020
	L6402		ATC1021
	F6204		ATF-107
	F6203		ATF-119
	F6401		ATF-155
	F6206		ATF7008
	F6202 (455kHz)		ATF7011
	L6206, L6208, L6403		LAU2R2J

TRANSFORMERS

Mark	No.	Description	Parts No.
	T6201		ATB7008
	T6401		ATE7002

CAPACITORS

Mark	No.	Description	Parts No.
	C6407		CCSQCH010C50
	C6410		CCSQCH020C50
	C6401, C6419		CCSQCH050C50
	C6208		CCSQCH100D50
	C6212, C6274, C6275, C6408		CCSQCH101J50
	C6221, C6222, C6416		CCSQCH150J50
	C6271		CCSQCH200J50
	C6415		CCSQCH330J50
	C6414		CCSQPH080D50
	C6413		CCSQPH220J50

Mark	No.	Description	Parts No.
	C6405		CCSQTH180J50
	C6234, C6235		CEAL010M50
	C6245		CEAL470M16
	C6231		CEAS010M50
	C6224		CEAS100M50
	C6243		CEAS101M16
	C6227		CEAS220M16
	C6236		CEAS2R2M50
	C6216		CEAS330M16
	C6262		CEAS3R3M50
	C6219		CEAS470M10
	C6244		CEAS470M16
	C6249, C6250, C6265, C6266		CEAS4R7M50
	C6258		CEJA470M16
	C6215		CFTXA103J50
	C6214		CFTXA224J50
	C6211, C6254, C6403, C6406, C6412		CKSQYB102K50
	C6201, C6205, C6210, C6213, C6237		CKSQYB103K50
	C6276, C6278, C6280, C6281, C6402		CKSQYB103K50
	C6409, C6417, C6418		CKSQYB103K50
	C6251, C6252		CKSQYB153K50
	C6203, C6259		CKSQYB223K50
	C6228		CKSQYB472K50
	C6209		CKSQYB473K50
	C6230		CKSQYB821K50
	C6218, C6223, C6255		CKSQYF103Z50
	C6220, C6226, C6242, C6256		CKSQYF223Z50
	C6225		CKSQYF473Z50

RESISTORS

Mark	No.	Description	Parts No.
	R6280		RD1/4PU101J
	R6413, R6416, R6418, R6906, R6909		RS1/8S000J
	R6401		RS1/8S470J
	VR6201 (10kΩ)		RCP1045
	Other Resistors		RS1/10S☐☐☐J

OTHERS

Mark	No.	Description	Parts No.
	BN6202	TERMINAL 4-P	AKE7028
	X6202	CRYSTAL RESONATOR (456kHz)	ASS1066
	X6201	CRYSTAL RESONATOR (7.2MHz)	ASS1093
		AM RF TUNING BLOCK	AXX7041
	CN6201	14P SOCKET	KP200IA14L

G. C ASSY

CAPACITORS

Mark	No.	Description	Parts No.
⚠	C1501, C1502 (3300μF/50V)		ACH7056

RESISTORS

Mark	No.	Description	Parts No.
	R1591, R1592		RD1/2PM563J

AF ASSY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC1901		BA3838F
	IC4202		BU4066BCF
	IC1301, IC4521		BU4094BCF
	IC4421		CXA1101M
⚠	IC1001		ICP-N75
	IC1101		M62419FP
	IC1801		M62429FP
	IC7102		NJU9702D
	IC7101		NJW1102FG1
	IC1151, IC1902, IC4101, IC4301, IC4501		XLA4558F-P
	Q1011, Q1015		2SA1037K
⚠	Q1010		2SA965
	Q4351		2SB1197K
⚠	Q1004, Q1009		2SB1237X
⚠	Q1002		2SC2235
	Q4356		2SC2240
	Q4355		2SC2411K
	Q1005, Q1012, Q1018, Q4101, Q4102		2SC2412K
	Q4203, Q4204, Q4305, Q4306		2SC2412K
	Q4451 -Q4453		2SC2412K
	Q4353, Q4354		2SD1781K
⚠	Q1001, Q1003		2SD1858X
	Q1016, Q1017, Q1151 -Q1154		2SD2114K
	Q1801, Q1802, Q4301, Q4302, Q4461, Q4462		2SD2114K
	Q1901, Q4307, Q4308		2SK373
	Q4357, Q4521, Q4522		DTA124EK
	Q1006, Q1014, Q1303 -Q1305, Q4208		DTA143EK
	Q4303, Q4523, Q4524		DTA143EK
	Q4352		DTC124EK
	Q1013, Q4207, Q4455		DTC143EK
	D1028, D1030, D4301 -D4304		1SS252
	D1019, D1024, D1026, D1027		1SS254
	D1033, D1034, D1035, D1038, D1053		1SS254
	D1301, D1901, D4201, D4305, D4306		1SS254
	D4310, D4311, D4501, D4552		1SS254
	D1029, D1036, D1103, D7101, D7102		1SS355
	D1003		D2SBA20
	D1017		MTZJ33B
	D1037		MTZJ39D
	D1141		MTZJ4.7B
	D1012 -D1014		MTZJ5.6B
	D1025		MTZJ8.2B
⚠	D1001, D1002, D1008, D1009		S5688G
	D1015, D1016		S5688G

COILS AND FILTERS

Mark	No.	Description	Parts No.
	L1001, L1002 (1μH)		ATH-133
	L4351		ATX7002
	L7101		LAU220J
	L4301, L4302		LTA472J
	L4303, L4304		LTA822J
	F4401, F4402		RTF1217

SWITCHES AND RELAYS

Mark	No.	Description	Parts No.
	RY1001		ASR7007

CAPACITORS

Mark	No.	Description	Parts No.
	C4363		CCCSL151K500
	C4319, C4320		CCCSL271K500
	C1916, C4323, C4324		CCSQCH100D50
	C7131		CCSQCH102J50
	C4516		CCSQCH121J50

Mark	No. Description	Parts No.
	C4998, C4999	CCSQCH391J50
	C4101, C4102, C7130, C7155, C7162	CCSQCH561J50
	C4211, C4212, C7107, C7110	CCSQCH681J50
	C4151, C4152	CCSQCH821J50
	C7103	CEANL220M25
	C1083, C1084	CEANP4R7M50
	C1117, C1118, C4303, C4304	CEAS010M50
	C4451, C4452	CEAS010M50
	C1107, C1108, C1109, C1110	CEAS100M50
	C1010, C1020, C4364	CEAS100M50
	C4405, C4407, C7129, C1115, C1116	CEAS100M50
	C1901, C1902	CEAS100M50
	C1009	CEAS101M100
	C4401, C4408, C7010, C7011, C7132	CEAS101M25
⚠	C1003	CEAS102M35
	C1907, C4453	CEAS220M50
	C7139	CEAS221M10
⚠	C1004	CEAS222M16
⚠	C1002	CEAS222M35
	C1151, C1152	CEAS2R2M50
	C1159, C1160, C1701, C1702	CEAS2R2M50
	C1801, C1802, C1903 -C1905	CEAS2R2M50
	C1913, C1914, C4207, C4208	CEAS2R2M50
	C4315, C4316, C4403, C4404	CEAS2R2M50
	C4454, C4455, C4515, C7137, C7138	CEAS2R2M50
	C4103, C4104, C4309, C4310	CEAS330M16
	C4317, C4318	CEAS330M16
⚠	C1001	CEAS332M16
	C1011, C4357	CEAS3R3M50
	C1005 -C1008, C1141, C1143, C1144	CEAS470M16
	C1161, C1162, C4107, C4108, C4351	CEAS470M16
	C4359, C4360, C7104, C7160	CEAS470M16
	C1029 -C1032	CEAS471M10
	C1012, C1021, C4301, C4302, C7122	CEAS4R7M50
	C7125, C7153	CEAS4R7M50
	C4402, C4406	CEASR68M50
	C7106	CEJA220M25
	C1113, C1114	CEJA2R2M50
	C7108, C7109, C7111, C7112	CFTXA104J50
	C7116 -C7119, C7136, C7158, C7159	CFTXA104J50
	C7115, C7120	CFTXA223J50
	C1908, C7121, C7123, C7124, C7126	CFTXA224J50
	C7113, C7114, C7134	CFTXA473J50
	C4511	CKSQCH101J50
	C7157, C7161	CFTXA683J50
	C7135	CFTXA684J50
	C1080, C1304, C1305, C1915, C1919	CKSQYB102K50
	C7179	CKSQYB102K50
	C1081	CKSQYB103K50
	C1014, C1016, C1022 -C1027, C7012	CKSQYB104K25
	C1157, C1158, C7165	CKSQYB104K25
	C4313, C4314	CKSQYB182K50
	C7163	CKSQYB222K50
	C1045 -C1048, C1155, C1156	CKSQYB223K50
	C1101, C1102	CKSQYB154K
	C4307, C4308	CKSQYB273K50

Mark	No. Description	Parts No.
	C4352, C4354	CKSQYB332K50
	C4305, C4306	CKSQYB333K50
	C1146, C1147, C1803, C1804	CKSQYB471K50
	C1911, C1912	CKSQYB471K50
	C4356, C4996, C4997	CKSQYB472K50
	C1017, C1018, C1069	CKSQYB473K50
	C1909	CKSQYB473K50
	C7156	CKSQYB562K50
	C1103 -C1106	CKSQYB682K50
	C1041 -C1044, C1142, C1145, C1191	CKSQYF104Z50
	C1306, C1906, , C4471, C4514, C7152	CKSQYF104Z50
	C4409, C4410	CQMA103J50
	C4358	CQMA223K250
	C7105	CQMA472J50
	C7133	CQMA562J50
	C4105, C4106	CQMA682J50
	C4311, C4312	CQMA823J50
	C4361	CQPA822J100

RESISTORS

Mark	No. Description	Parts No.
	R1041, R1042	RD1/2PM100J
	R4353	RD1/2PM181J
	R1030	RD1/2PM470J
	R4357	RD1/2PM4R7J
	R1031, R1032	RD1/4PMFL100J
	R1117, R1918, R4112, R4304, R4325, R4326	RD1/4PU103J
	R4471, R4472	RD1/4PU102J
	R1026	RD1/4PU123J
	R1127, R1128	RD1/4PU133J
	R1141	RD1/4PU181J
	R4223	RD1/4PU222J
	R1003	RD1/4PU470J
	R4114, R4324	RD1/4PU820J
	R7111	RS1/10S104F
	R4360	RS1LMF151J
	R1013	RS3LMF391J
	R1051, R1052	RS3LMFR22J
	VR4201-VR4204 (22kΩ)	PCP1030
	VR1351 (4.7kΩ)	RCP1020
	VR4301,VR4302 (4.7kΩ)	RCP1139
	VR4351,VR4352 (220kΩ)	RCP1142
	Other Resistors	RS1/10S☐☐☐J

OTHERS

Mark	No.	Description	Parts No.
	CN1005	PIN JACK 1-P	AKB7042
	JA1001	2P PIN-JACK	AKB7043
	CN1011	SPEAKER TERMINAL 4-P	AKE7030
	CN4003	2P TOP POST	B2B-EH
	CN4002	3P TOP POST	B3B-EH
	CN4001	3P TOP POST (RED)	B3B-EH-R
	CN1007,CN1010	35P CONNECTOR	HLEM35S-1
	CN1702	13P PLUG	KM200TA13
	JA1006	2P PIN-JACK	RKB1041
	JA1004	JACK	RKN1004
		PCB BINDER	VEF1008
	X7101	CERAMIC RESONATOR (2.00MHz)	ASS7011

FRONT AMP ASSY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
⚠	IC1552, IC1553		ICP-N25
⚠	IC1551		STK4162-2GP
	Q1507, Q1509		2SA1037K
	Q1504, Q1506		2SA992
	Q1503, Q1505		2SC1845
	Q1508		2SC2412K
⚠	Q1502		IRF530
⚠	Q1501		IRF9540A
	D1507 -D1510		1SS252
⚠	D1511		D3SBA20
	D1501, D1502		MTZJ18B
	D1505, D1506		MTZJ22C
	D1503, D1504		MTZJ4.7B

CAPACITORS

Mark	No.	Description	Parts No.
	C1565		CEANP470M50
	C1562 -C1564		CEAS100M50
	C1559, C1560		CEAS101M25
⚠	C1505, C1506		CEJA101M10
	C1507		CEJA101M10
	C1503, C1504		CEJA101M6R3
	C1557, C1558		CEJA220M25
	C1551, C1552		CEJA2R2M50
	C1553, C1554		CKSQYB102K50

RESISTORS

Mark	No.	Description	Parts No.
	R1526		RD1/2PM183J
	R1559 -R1562, R1565, R1566		RD1/2PM222J
	R1555, R1556		RD1/2PM563J
	R1563, R1567		RD1/4PMFL101J
	R1564		RD1/4PMFL102J
⚠	R1505, R1506		RFA1/4PS101J
	R1507, R1508		RN1/6PQ1001F
	R1509, R1510		RN1/6PQ7501F
	R1205, R1206		RS1/10S101J
	R1531		RS1/10S102J
	R1222		RS1/10S222J
	R1211		RS1/10S470J
	Other Resistors		RD1/4PU□□□J

OTHER

Mark	No.	Description	Parts No.
	TH1501	THERMISTOR	AEX7002

REAR-AMP REG ASSY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
⚠	IC1202		NJM7805FA
⚠	IC1201		NJM7812FA
	IC1601		TDA8560Q
	Q1204, Q1205, Q1213, Q1606 -Q1608		2SA1037K
	Q1201		2SB1375
	Q1203, Q1206, Q1211, Q1215, Q1602		2SC2412K
	Q1202		2SD2012
	Q1207		DTA124EK
	Q1212		DTC114TK
	Q1208		DTC124EK
	Q1214		DTC143EK
⚠	Q1601		IRFI9Z24G
	D1203, D1206, D1207, D1210 -D1214		1SS254
	D1217, D1218, D1604		1SS254
	D1601		MTZJ18B
	D1603		MTZJ12B
	D1215, D1602		MTZJ4.7B
	D1219		MTZ8.2B
	D1201, D1202, D1216		MTZJ8.2C

CAPACITORS

Mark	No.	Description	Parts No.
	C1211 (0.33μF/50V)		ACG1053
	C1209		CEAS010M50
	C1605		CEAS101M35
	C1202, C1204		CEAS2R2M50
	C1206		CEAS470M16
	C1601, C1602		CEASR47M50
	C1609		CEJA101M10
	C1205, C1607		CEJA470M16
	C1201, C1203		CKPUYB102K50
	C1207, C1208, C1603, C1604		CKSQYB102K50
	C1611 -C1614		CKSQYB102K50
	C1606		CKSQYB473K50
	C1210		CKSQYF104Z50
	C1040		CQMA223K250

RESISTORS

Mark	No.	Description	Parts No.
	R1219		RD1/2PM330J
	R1620		RS1/10S103J
	Other Resistors		RD1/4PU□□□J

OTHERS

Mark	No.	Description	Parts No.
	PCB BINDER		VEF1008

SECONDARY ASSY

OTHERS

Mark	No.	Description	Parts No.
⚠	IC1004-IC1007	IC PROTECTOR (4A)	AEK7018

OPE. CENTER ASSY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC2101		BU4094BCF
	Q2101		2SA1560
	Q2109		2SB1237X
	Q2105, Q2106		2SC4040
	Q2107, Q2108		DTA124EK
	Q2103, Q2104		DTA143ES
	Q2102		DTC143ES
	D2102, D2103		1SS254
	D2101, D2104 -D2106		S5688G

CAPACITORS

Mark	No.	Description	Parts No.
	C2101	CKSQYF104Z50	

RESISTORS

Mark	No.	Description	Parts No.
	R2101, R2102		RN1/6PQ3902F
	R2103, R2105, R2107		RN1/6PQ4701F
	R2104, R2106, R2108		RN1/6PQ5102F
	R2125 -R2127		RS1/10S222J
	R2115, R2116		RS1/10S393F

Mark	No.	Description	Parts No.
	R2129		RS1/10S470J
	R2117, R2119, R2121		RS1/10S472F
	R2123, R2124		RS1/10S473J
	R2118, R2120, R2122		RS1/10S513F
	Other Resistors		RD1/4PU□□□J

OTHERS

		CABLE HODLER (15P)	51063-0905
		CABLE HOLDER (9P)	51063-1505
	CN2201	5P JUMPER CONNECTOR	52147-0510
	CN2301	10P JUMPER CONNECTOR	52147-1010
	J2104	JUMPER WIRE	D15A09-075-2468
	CN2102	35P CONNECTOR	HLEM35S-1
	CN2101	39P CONNECTOR	HLEM39S-1

OPE. RIGHT ASSY

SWITCHES AND RELAYS

	S2201, S2202, S2208 -S2211		ASG1034
	S2212		ASX7004

CAPACITORS

	C2201, C2202		CKSQYB223K50

RESISTORS

	R2201		RN1/6PQ1201F
	R2202		RN1/6PQ1801F
	R2210		RN1/6PQ1802F
	R2203		RN1/6PQ2701F
	R2208		RN1/6PQ4701F
	R2211		RN1/6PQ5602F
	R2209		RN1/6PQ8201F

OPE. LEFT ASSY

SEMICONDUCTORS

	Q2351		DTC143EK
	D2301		1SS254
	D2302 (RED)		SLR-342VCT32

SWITCHES AND RELAYS

	S2301 -S2304, S2307 -S2309		ASG1034

RESISTORS

	R2307		RN1/6PQ1201F
	R2301, R2308		RN1/6PQ1801F
	R2302, R2309		RN1/6PQ2701F
	R2303		RN1/6PQ4701F
	R2304		RN1/6PQ8201F
	Other Resistors		RD1/4PU□□□J

HOME SW ASSY

SWITCHES AND RELAYS

	S8001		DSG1048

CD DOOR SW ASSY

SWITCHES AND RELAYS

	S8002		DSG1016
	S8003		PSG1008

Mark	No.	Description	Parts No.

CD DOOR MOTOR ASSY

OTHERS

	J8009	3P JUMPER WIRE	D20PWW0310E

SW 1 ASSY

SWITCHES AND RELAYS

	S2203 -S2207		ASG1034

RESISTORS

	R2206		RN1/6PQ1802F
	R2204		RN1/6PQ4701F
	R2207		RN1/6PQ5602F
	R2205		RN1/6PQ8201F

OTHERS

	J2202	3P JUMPER WIRE	D20PWW0310E

SW 2 ASSY

SWITCHES AND RELAYS

	S2305, S2306		ASG1034

RESISTORS

	R2305		RN1/6PQ1802F
	R2306		RN1/6PQ5602F

LED ASSY

SEMICONDUCTORS

	D2303 (GREEN)		SLR-342PCT31

OTHERS

	J2302	3P JUMPER WIRE	D20PWW0315E

TX CONNECT ASSY

SEMICONDUCTORS

	Q1701		2SB1197K
	Q1702		DTC143EK
	D1701		1SS254

RESISTORS

	Other Resistors		RS1/10S□□□J

OTHERS

	CN1703	14P PLUG	KM200IB14
	CN1702	13P SOCKET	KP200TA13L

CD DOOR ASSY

SEMICONDUCTORS

	IC2002		BA3835F
	IC2001		PDG188B
	Q2004 -Q2008		2SA1037K
	Q2001		2SC2458
	Q2002		DTA143EK
	Q2003		DTC143EK
	D2002 -D2006, D2016 -D2019		1SS254
	D2011 -D2015		MPG5064X
	D2007		MTZJ5.1B

Mark	No.	Description	Parts No.

COILS AND FILTERS

	L2001		LAU220J

SWITCHES AND RELAYS

	S2101 -S2109		ASG1034

CAPACITORS

	C2015, C2016		CEJA010M50
	C2004		CEJA221M10
	C2001		CEJA470M10
	C2005, C2006		CEJAR47M50
	C2007, C2017 -C2020		CKSQYB102K50
	C2008 -C2011		CKSQYB104K25
	C2002, C2003		CKSQYB473K50
	C2012		CKSQYF104Z50
	C2014, C2022		CKSQYF105Z16

RESISTORS

	R2038		RA10T473J
	R2039, R2040		RA15T473J
	R2016, R2017		RN1/6PQ1002F
	R2099		RS1/10S000J
	R2006 -R2008, R2010, R2021		RS1/10S102J
	R2059, R2060, R2066 -R2069, R2073		RS1/10S102J
	R2014		RS1/10S103F
	R2009, R2011 -R2013, R2072		RS1/10S103J
	R2005		RS1/10S104J
	R2015		RS1/10S122F
	R2081		RS1/10S152J
	R2080		RS1/10S183J
	R2064, R2065, R2070, R2071		RS1/10S222J
	R2019, R2041, R2042, R2049, R2050		RS1/10S223J
	R2004	RS1/10S472J	
	R2020, R2045 -R2048		RS1/10S473J
	Other Resistors		RD1/4PU☐☐☐J

OTHERS

	V2001	FL TUBE	AAV7028
	X2001	CERAMIC RESONATOR (8MHz)	EFOEC8004A4
		FL HOLDER	ANG7112
		REMOTE RECEIVER UNIT	GP1U27X
	CN2001	39P CONNECTOR	HLEM39S-1

JOG ASSY

SEMICONDUCTORS

	Q2402, Q2404		2SA1037K
	D2403, D2406 (GREEN)		MBG5064X

SWITCHES AND RELAYS

	S2401 -S2403, S2405		ASG1034
	S2411		ASX1015

RESISTORS

	R2401		RN1/6PQ1002F
	R2403		RN1/6PQ1801F
	R2404		RN1/6PQ2701F
	R2402	RS1/10S122F	
	Other Resistors		RS1/10S☐☐☐J

HEADPHONE ASSY

SEMICONDUCTORS

	Q2501 -Q2504		2SC2412K

Mark	No.	Description	Parts No.

CAPACITORS

	C2501, C2502		CKSQYB102K50
	C2503		CKSQYF104Z50

RESISTORS

	R2501, R2502		RS3LMF331J
	Other Resistors		RS1/10S☐☐☐J

OTHERS

	CN2501	5P JUMPER CONNECTOR	52147-0510
		JACK	AKN7003

PRIMARY ASSY

COILS AND FILTERS

⚠	L101		ATF-151

CAPACITORS

⚠	C102 (0.01μF/AC250V)		ACG7020

OTHERS

	H101,.H102	FUSE CLIP	AKR1003

MIC ASSY

SEMICONDUCTORS

	IC2351		XLA4558F-P

COILS AND FILTERS

	L2301		LAU100J

CAPACITORS

	C2355		CCSQCH271J50
	C2357, C2358		CEJA010M50
	C2363		CKSQYB102K50
	C2352		CKSQYB122K50
	C2361		CKSQYB222K50
	C2351		CKSQYB473K50
	C2356, C2362		CKSQYF473Z50

RESISTORS

	R2358	RD1/4PU101J	
	VR2351 (10kΩ-B)		ACS1028
	Other Resistors		RS1/10S☐☐☐J

OTHERS

	JA2351	JACK	RKN1004

CD ASSY

SEMICONDUCTORS

	IC8151		CXA1372BQ
	IC8301		CXD2519Q
	IC8203		LA6517
	IC8201,IC8202		LA6520
	IC8001		PD4756A
	Q8002		2SC2712
	Q8301, Q8401, Q8402		2SK373
	Q8302, Q8403, Q8404		DTA124EK
	Q8001 ,Q8303		DTC143EK
	D8001		1SS252
	D8003, D8004, D8301 -D8303		1SS254
	D8403 -D8405		1SS254

Mark	No.	Description	Parts No.
	D8401, D8402		DAN202K
	D8219		MTZJ6.2B/C

COILS AND FILTERS

Mark	No.	Description	Parts No.
	L8301		LAU1R2J
	L8001		LAU220J

CAPACITORS

Mark	No.	Description	Parts No.
	C8003 (0.047F/5V)		ACH1246
	C8313, C8407, C8408		CCSQCH100D50
	C8009, C8014 -C8016		CCSQCH101J50
	C8401, C8402		CCSQCH151J50
	C8314		CCSQCH220J50
	C8167		CCSQCH561J50
	C8002		CEAS100M16
	C8301		CEAS101M10
	C8007		CEAS221M6R3
	C8403, C8404		CEAS2R2M50
	C8017		CEAS330M16
	C8201, C8202		CEAS331M16
	C8001		CEAS470M16
	C8155, C8156		CEAS4R7M50
	C8008, C8309		CEASR47M50
	C8010, C8012, C8164, C8312		CKSQYB102K50
	C8151, C8158, C8162, C8316, C8602		CKSQYB103K50
	C8306		CKSQYB152K50
	C8163		CKSQYB332K50
	C8160, C8166		CKSQYB333K50
	C8165		CKSQYB472K50
	C8004 -C8006, C8307		CKSQYB473K50
	C8405, C8406		CKSQYB681K50
	C8159, C8205, C8210, C8215		CKSQYF103Z50
	C8219, C8220, C8225, C8230, C8235		CKSQYF103Z50
	C8245		CKSQYF103Z50
	C8152 -C8154, C8157, C8161		CKSQYF104Z50
	C8302, C8303, C8601		CKSQYF104Z50

RESISTORS

Mark	No.	Description	Parts No.
	R8248		RD1/4PU100J
	R8001 -R8003, R8011 -R8013		RD1/4PU102J
	R8035, R8036		RD1/4PU102J
	R8409, R8410		RD1/4PU153J
	R8015		RD1/4PU272J
	R8023, R8024, R8221, R8222		RD1/4PU473J
	R8226, R8227		RD1/4PU473J
	VR8151,VR8152 (22kΩ)		RCP1103
	Other Resistors		RS1/10S□□□J

OTHERS

Mark	No.	Description	Parts No.
	X8301 (33.8688MHz)		ASS7000
	X8001 (4.19MHz)		VSS1014
	CN8005	5P JUMPER CONNECTOR	52147-0510
	CN8002	22P CONNECTOR	HLEM22S-1
	CN8001	35P CONNECTOR	HLEM35S-1
	CN8201	6P JACK	VKN-004

MECHA PCB ASSY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	Q651		DTC124ES

RESISTORS

Mark	No.	Description	Parts No.
	R652 (10KΩ)		ACN7011
	R651 (56KΩ)		ACN7012
	R653 (220Ω)		DCN1062
	R654 (0Ω)		DCN1065

OTHERS

Mark	No.	Description	Parts No.
	CN652	12P CONNECTOR	12FMZ-AST
	CN651	4P CONNECTOR	173979-4
	CN653	22P CONNETOR	SLEM22R-2

SENSOR PCB ASSY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	D652		GP1S24

OTHERS

Mark	No.	Description	Parts No.
	J652	3P JUMPER WIRE	D20PWW0315E

MOTOR PCB ASSY

OTHERS

Mark	No.	Description	Parts No.
		LOADING MOTOR	VXM1034

SW PCB ASSY

SWITCHES AND RELAYS

Mark	No.	Description	Parts No.
	S651, S652		VSG1006

OTHERS

Mark	No.	Description	Parts No.
	J656	3P JUMPER WIRE	D20PWW0315E

MECHANISM BOARD ASSY

SWITCHES AND RELAYS

Mark	No.	Description	Parts No.
	S610		DSG1016

OTHERS

Mark	No.	Description	Parts No.
	CN610	4P CONNECTOR	173979-4

SENSOR BOARD ASSY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	Q601 -Q604		PS3322

RESISTORS

Mark	No.	Description	Parts No.
	Other Resistors		RD1/4PU□□□J

OTHERS

Mark	No.	Description	Parts No.
	CN601	7P JUMPER WIRE	52151-0710

LED BOARD ASSY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	D601 -D604		AN329

RESISTORS

Mark	No.	Description	Parts No.
	Other Resistors		RD1/4PU□□□J

OTHERS

Mark	No.	Description	Parts No.
	J601	3P JUMPER WIRE	D20PWW0315E

MOTOR BOARD ASSY

OTHERS

Mark	No.	Description	Parts No.
	J602	3P JUMPER WIRE	D20PWW0305E

7. ADJUSTMENTS

7.1 TUNER SECTION

■ FM Tuner Section

- Set the mode selector to FM BAND.
- Connect the wiring as shown in Fig. 1–1.

Step No.	Adjustment Title	FM SG (1kHz, ±75kHz dev.)		Reception Frequency Display	Adjustment Location	Specifications
		Frequency (MHz)	Level (dBμV)			
1	Front End Sensitivity	98	0-30	98MHz	L6402 T6401	Adjust so that the DC voltage between the IC6201-Pin 20 becomes at maximum level.
2	TUNED IND. Lighting Level	98	15±2	98MHz	VR6201	Adjust so that the indicator of TUNED IND. starts to light up.

Notes:

- *Before adjusting, make sure there is no gap between L6401 and L6402. If there is a gap between them, bring them into contact with each other first, and then make adjustments.*

■ AM Tuner Section

- Set the mode selector to AM BAND.
- Connect the wiring as shown in Fig. 1–1.

Step No.	Adjustment Title	AM SG (400Hz, 30% Mod.)		Reception Frequency Display	Adjustment Location	Specifications
		Frequency (kHz)	Level (dBμV/m)			
1	AM Front and Sensitivity Adjustment	999*1	35–45	999kHz*1	T6201	Adjust so that the DC voltage between the IC6201-Pin 20 becomes at maximum level.

*1: For the area using 10kHz step, frequencies should be 1000 kHz

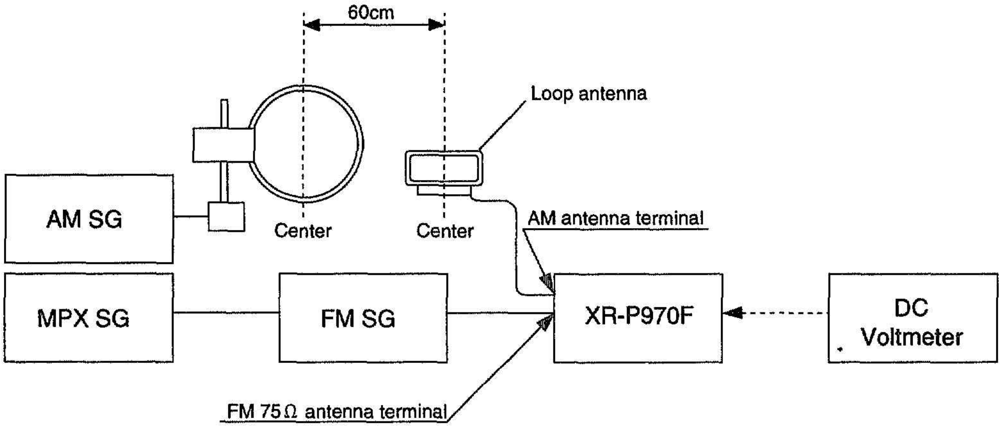


Fig. 1–1 AM and FM Adjustment Wiring Diagram

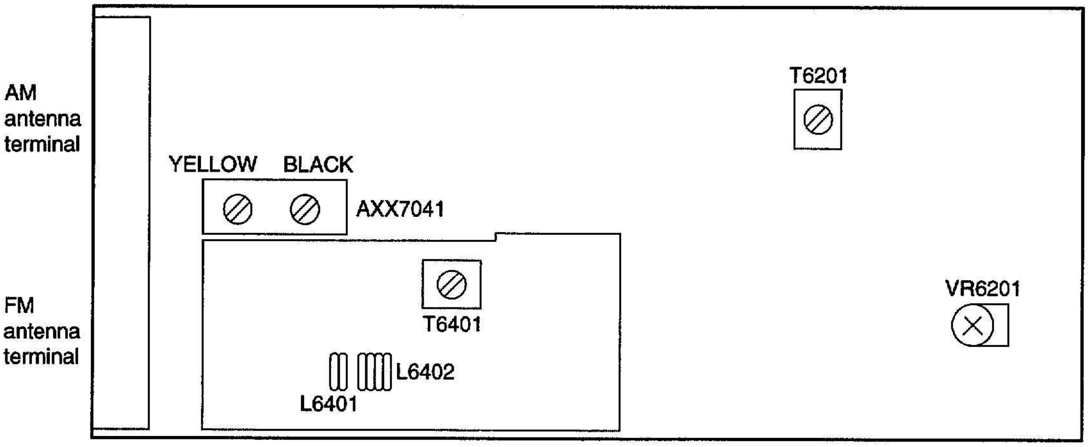

AM antenna terminal
FM antenna terminal
T6201
YELLOW
BLACK
AXX7041
T6401
VR6201
L6402
L6401

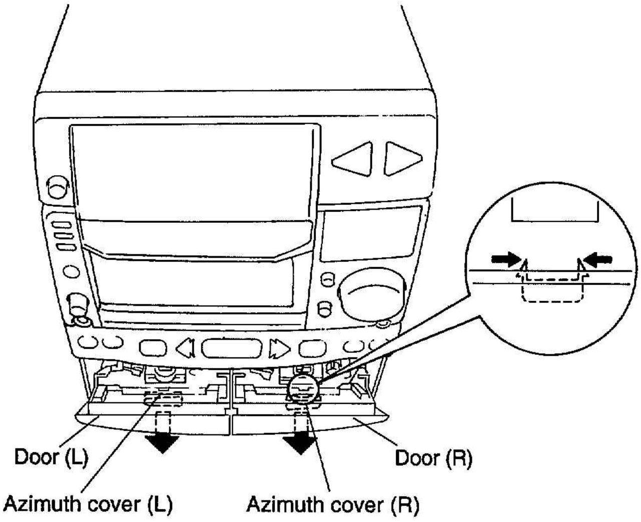
Fig. 1–2 Adjustment Points

7.2 CASSETTE DECK SECTION

- Adjustment points and test points are shown in Fig. 2-3 and Fig. 2-4.

■ Before Adjustment

1. For execution of head angle adjustment, first remove the Azimuth cover (L) and (R).
2. Open the cassette doors (L) and (R).
3. Insert your fingers into the cassette door, push down the two hooks at the upper side of the Azimuth cover, and push them slightly out to the front. Excessive pushing at this time may make it impossible to close the cassette door.
4. Confirm that the Azimuth cover (L) and (R) have been pushed out a little to the front, and then close the cassette doors (L) and (R) and remove the Azimuth cover.


Door (L)
Door (R)
Azimuth cover (L)
Azimuth cover (R)

■ Mechanical Adjustment

- Test tape: STD-301 (3kHz, 30min).

1. Tape Speed Adjustment

No.	Mode	Test Tape	Adjusting Points	Measurement Points	Adjustment Procedure	Remarks
1	Deck ₀ PLAY	STD-301 (Playback: 3kHz)	AF BOARD Assy VR1351	TAPE TEST POINT (Rch) (AF Assy)	Press the PLAY SW and adjust so that the reading becomes 3000Hz ±20Hz. Confirm that wow & flutter level is below 0.2% (in the reverse direction, confirm that the reading is within 3000Hz ±60Hz).	

■ Electrical Adjustment

Check the following before starting.

1. Confirm that the tape speed adjustment has been completed.
2. Clean the heads and demagnetize them using a head eraser.
3. Set the measurement level to 0 dBV = 1 Vrms.
4. Use the specified tape for adjustment. Use the labeled (A) side of the test tape.
   STD-331E: For playback adjustment
   STD-631or STD-632: Normal blank tape
5. Provide yourself with the following measuring devides:
   - AC millivoltmeter
   - Low-frequency oscillator
   - Attenuator
   - Oscilloscope
6. Adjust both right and left channels unless otherwise specified.
7. Turn the DOLBY NR switch off unless otherwize specified.
8. Warm up the unit for several minutes before adjustment. In particular, be sure to warm up the unit in the REC/PLAY mode for 3 to 5 minutes before starting recording/playback frequency characteristics adjustment.
9. Always follow the indicated adjustment order. Otherwise, a complete adjustment may not be achieved.

Playback Adjustment (Decks I and II)

1. Head Azimuth Adjustment
2. Playback Level Adjustment

Recording Adjustment (Deck II)

1. Bias Oscillation Frequency Adjustment
2. Recording Bias Adjustment
3. Recording Level Adjustment.
4. ALC Operation Check

* *As the reference recording level is 250nwb/m for STD-331E, the recording level will be higher by 4 dB for STD-331B (160nwb/m). When adjusting, pay carefull attention to the type of tape used.*

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
"DOLBY" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.

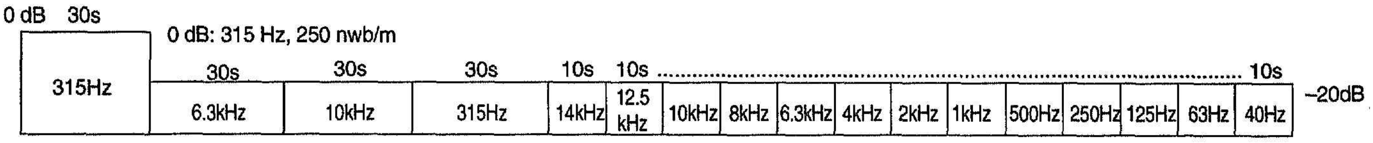

0 dB 30s
315Hz
0 dB: 315 Hz, 250 nwb/m
30s
30s
30s
10s
10s
10s
6.3kHz
10kHz
315Hz
14kHz
12.5 kHz
10kHz
8kHz
6.3kHz
4kHz
2kHz
1kHz
500Hz
250Hz
125Hz
63Hz
40Hz
–20dB

Fig. 2–1 STD-331E Test Tape

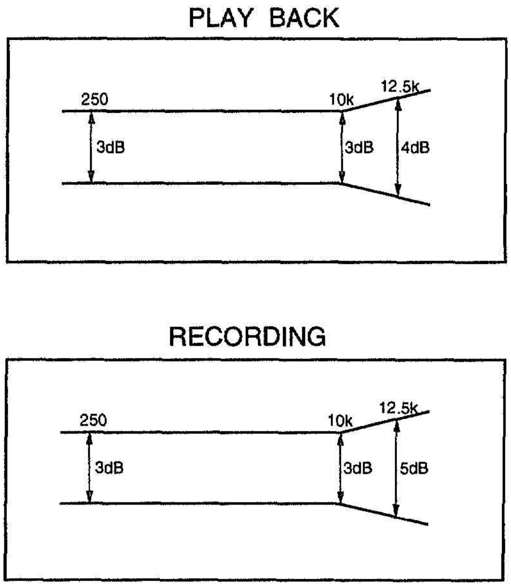


Fig. 2–2 Frequency Characteristics

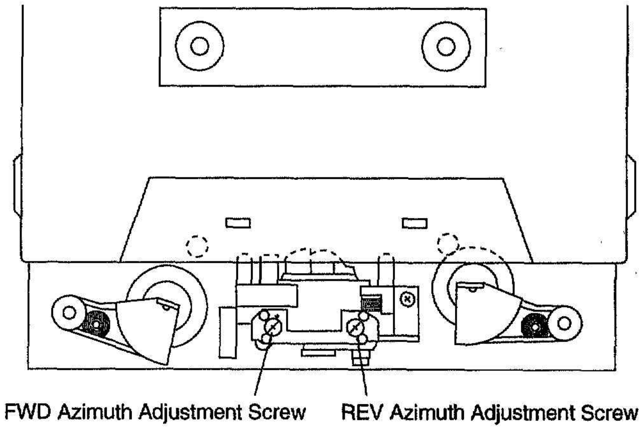

FWD Azimuth Adjustment Screw
REV Azimuth Adjustment Screw

Fig. 2–3 Head Azimuth Adjustment

■ Playback Adjustment

1. Head Azimuth Adjustment

- This unit is equipped with auto tape selector.
- Do not switch between forward and reverse operation with the screwdriver inserted.

Step	Tape Selector (AUTO)	Mode	Input Signal/ Test Tape	Adjusting Points		Measurement Points	Adjustment Value	Remarks
1	AUTO (NORMAL)	PLAY	STD-331E test tape (Playback: 10kHz, –20dB)	Deck I	Head azimuth adjustment screw (Fig. 2-3)	TAPE TEST POINT (L, Rch)	Max. playback signal level	After adjustment, apply silicon bond to the head azimuth adjustment screw.
				Deck II				

2. Playback Level Adjustment

- Since this adjustment determines playback Dolby NR level, perform it carefully.

Step	Tape Selector (AUTO)	Mode	Input Signal/ Test Tape	Adjusting Points		Measurement Points	Adjustment Value	Remarks
1	AUTO (NORMAL)	PLAY	STD-331E test tape (Playback: 315Hz, 0dB)	Deck I	VR4203 (Lch) VR4204 (Rch)	TAPE TEST POINT (L, Rch)	– 6.9 dBV	
				Deck II	VR4201 (Lch) VR4202 (Rch)			

Note: Please execute playback level adjustment always in the order of deck I → deckI
When deck I has been adjusted, always adjust deck I also.

■ Recording Adjustment

1. Bias Oscillation Frequency Adjustment

Step	Tape Selector (AUTO)	Mode	Input Signal/ Test Tape	Adjusting Points		Measurement Points	Adjustment Value	Remarks
1	AUTO (NORMAL)	REC	Load the STD-631 or STD-632 test tape and set the recording mode.	Deck I	———	———	Oscillation frequency to be 105.0kHz ±2kHz.	When the power is turned ON while the MEMORY button is depressed, the frequency will decrease 2 – 3 kHz.
				Deck II	L4351	Between Ⓐ point in Fig. 2-4 and GND.		

2. Recording Bias Adjustment

Step	Tape Selector (AUTO)	Mode	Input Signal/Test Tape	Adjusting Points		Measurement Points	Adjustment Value	Remarks
1	AUTO (NORMAL)	REC	Input a 315Hz signal to the MD/ CD II terminal and set the input selector to MD/CD II.	Deck I	——	TAPE TEST POINT (L, Rch)	– 26.9 dBV	
				Deck II	Input signal level			
2	AUTO (NORMAL)	REC→ PLAY	Load the STD-631 or STD-632 test tape and record/playback the 315Hz and 10kHz signals. (see the Note below)	Deck I	——	TAPE TEST POINT (L, Rch)	Repeat adjustment until playback level of the 10kHz signal is within 0±0.5dB from that of the 315Hz signal.	
				Deck II	VR4351 (Lch) VR4352 (Rch)			

Note: Set the 10kHz input signal level to the same value as the 315Hz input signal level of step 1.

3. Recording Level Adjustment

Step	Tape Selector (AUTO)	Mode	Input Signal/Test Tape	Adjusting Points		Measurement Points	Adjustment Value	Remarks
1	AUTO (NORMAL)	REC	Input a 315Hz signal to the MD/ CD II terminal and set the input selector to MD/CD II.	Deck I	Input signal level	TAPE TEST POINT (L, Rch)	– 10.9 dBV	
				Deck II				
2	AUTO (NORMAL)	REC → PLAY	STD-631 or STD-632 test tape and record/playback the 315Hz signal.	Deck I	——	TAPE TEST POINT (L, Rch)	Repeat recording, playback and adjustment until playback level of the 315Hz signal becomes –10.9dBV.	
				Deck II	VR4301 (Lch) VR4302 (Rch)			

4. ALC Operation Check

Step	Tape Selector (AUTO)	Mode	Input Signal/Test Tape	Adjusting Points	Measurement Points	Adjustment Value	Remarks
1	AUTO (NORMAL)	REC	Input a 315Hz signal to the MD/CD II terminal and set the input selector to MD/CD II.	Input signal level	TAPE TEST POINT (L, Rch)	– 8.2 dBV	
2				Set to a level +10 dB above the input level at step 1.		Confirm that the reading is –3.2±2.5dBV.	

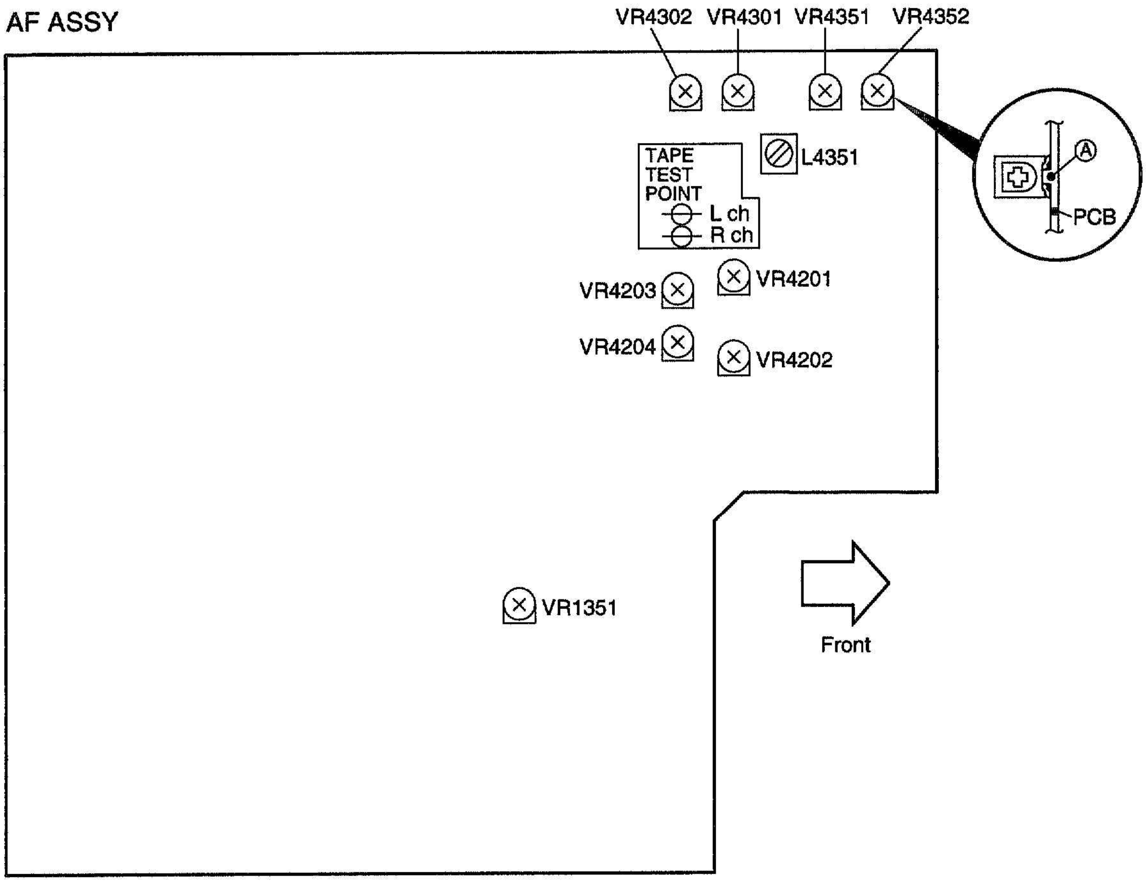
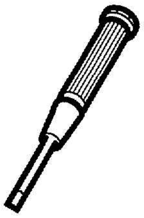
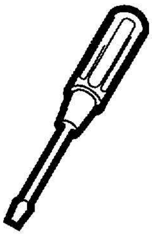
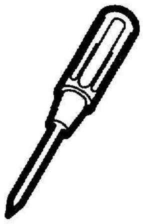
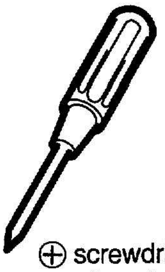
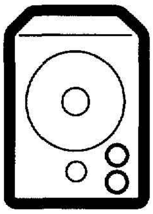
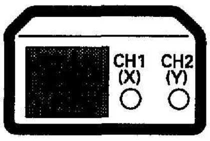
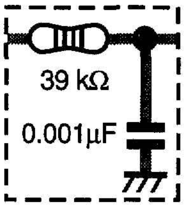

AF ASSY
VR4302
VR4301
VR4351
VR4352
TAPE TEST POINT
L ch
R ch
L4351
Ⓐ
PCB
VR4203
VR4201
VR4204
VR4202
VR1351
Front

Fig. 2–4 Adjustment and Measurement points

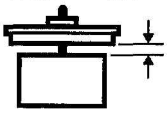
7.3 CD SECTION (CD部の調整)

1. PREPARATIONS (準備)

1.1 Jigs and Measuring Instruments (使用測定器/治工具類)

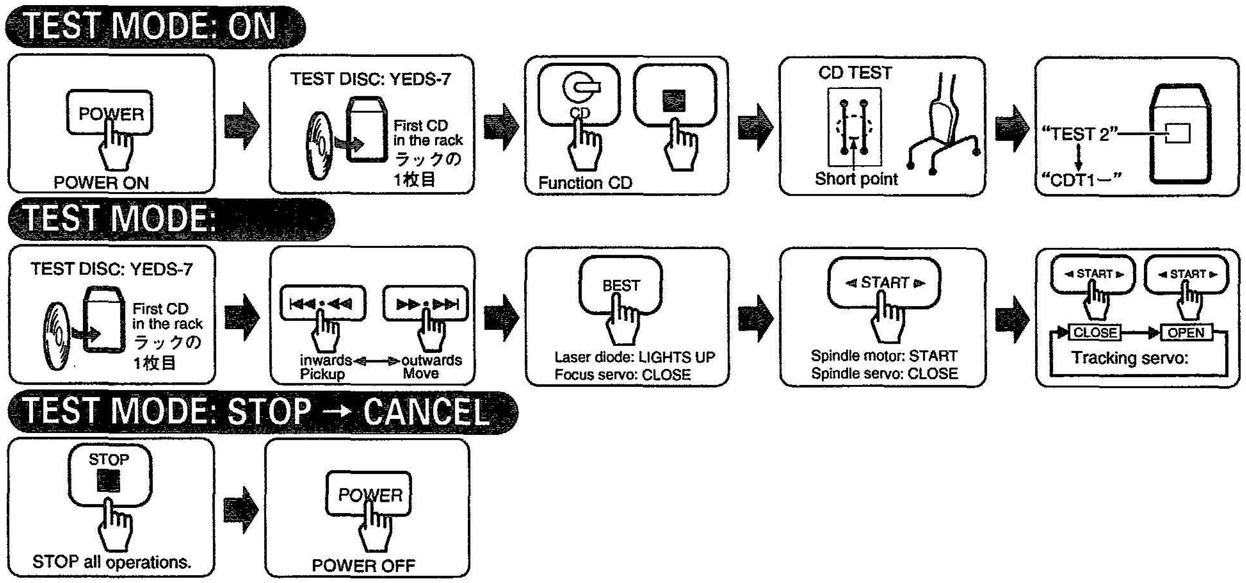
 CD TEST DISC (YEDS-7)	 ⊖ Precise screwdriver	 ⊖ screwdriver (small)	 ⊕ screwdriver (medium)
 ⊕ screwdriver (large)	 Low-frequency oscillator	 Dual-trace oscilloscope (10 : 1 probe)	 Low pass filter (39 kΩ + 0.001μF)

1.2 Necessary Adjustment Points (調整に必要な項目)

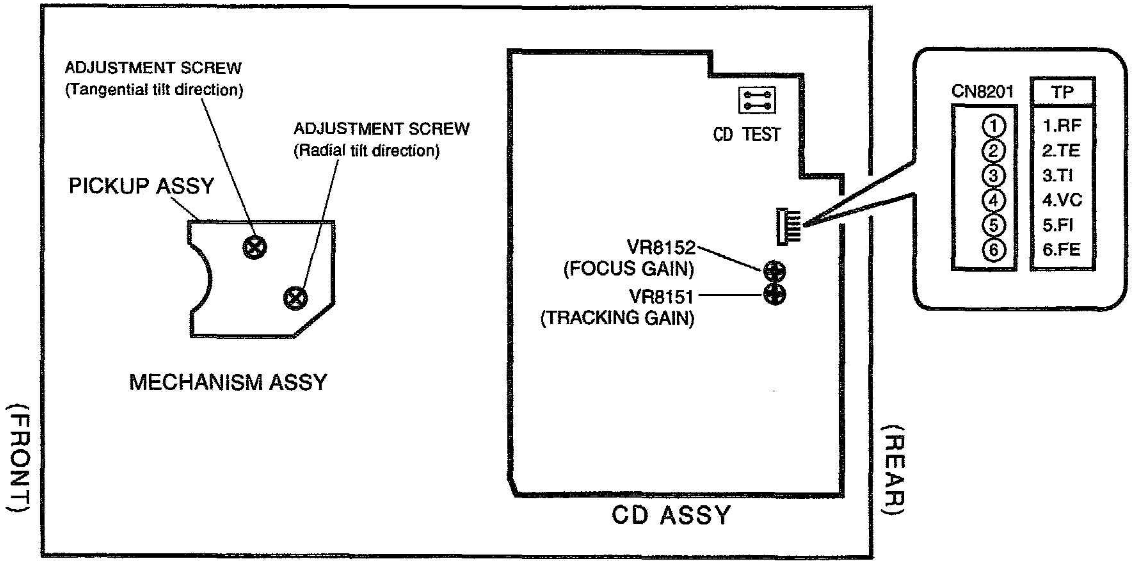
When (このような時)	Adjustment points
Exchange PICKUP (ピックアップを交換した時)	1.2.3.4.5.6. → Page 71−73
Exchange CD ASSY (CD ASSYを交換した時)	1.2.3.4.5.6. → Page 71−73
Exchange SERVO MECH ASSY (サーボメカ ASSYを交換した時)	1.2.3.4.5.6. → Page 71−73
Exchange SPINDLE MOTOR (スピンドルモーターを交換した時)	 ADJ → Page 15

2. ADJUSTMENT (調整)

2.1 How to Start/Cancel Test Mode （テストモ-ドの設定/解除）


TEST MODE: ON
POWER
POWER ON
TEST DISC: YEDS-7
First CD in the rack
ラックの1枚目
CD
Function CD
CD TEST
Short point
"TEST 2"
"CDT1–"
TEST MODE:
TEST DISC: YEDS-7
First CD in the rack
ラックの1枚目
inwards ↔ outwards
Pickup Move
BEST
Laser diode: LIGHTS UP
Focus servo: CLOSE
◄ START ►
Spindle motor: START
Spindle servo: CLOSE
◄ START ►
◄ START ►
CLOSE
OPEN
Tracking servo:
TEST MODE: STOP → CANCEL
STOP
STOP all operations.
POWER
POWER OFF

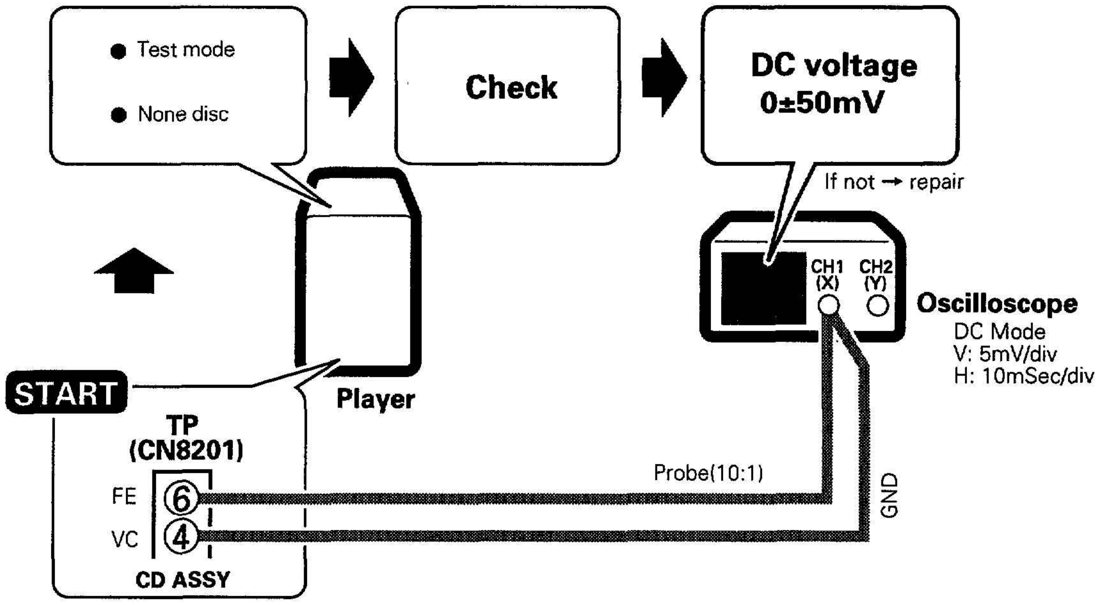
2.2Adjustment Locations（テストポイントと調整用VRの位置）


ADJUSTMENT SCREW
(Tangential tilt direction)
ADJUSTMENT SCREW
(Radial tilt direction)
PICKUP ASSY
MECHANISM ASSY
(FRONT)
CD TEST
VR8152
(FOCUS GAIN)
VR8151
(TRACKING GAIN)
CD ASSY
(REAR)
CN8201
①
②
③
④
⑤
⑥
TP
1.RF
2.TE
3.TI
4.VC
5.FI
6.FE

2.3 Check and Adjustment (確認、調整)

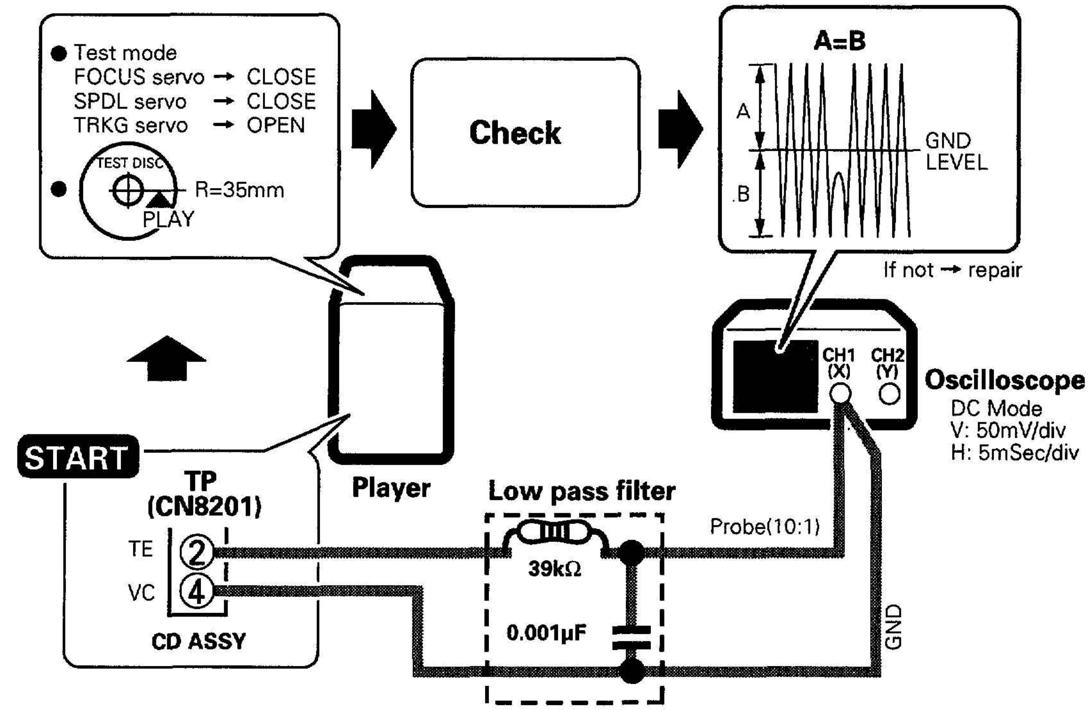
1. Focus Offset Check

(フォーカスオフセット確認)


● Test mode
● None disc
Check
DC voltage
0±50mV
If not → repair
CH1 (X)
CH2 (Y)
Oscilloscope
DC Mode
V: 5mV/div
H: 10mSec/div
START
Player
TP
(CN8201)
FE
VC
6
4
CD ASSY
Probe(10:1)
GND

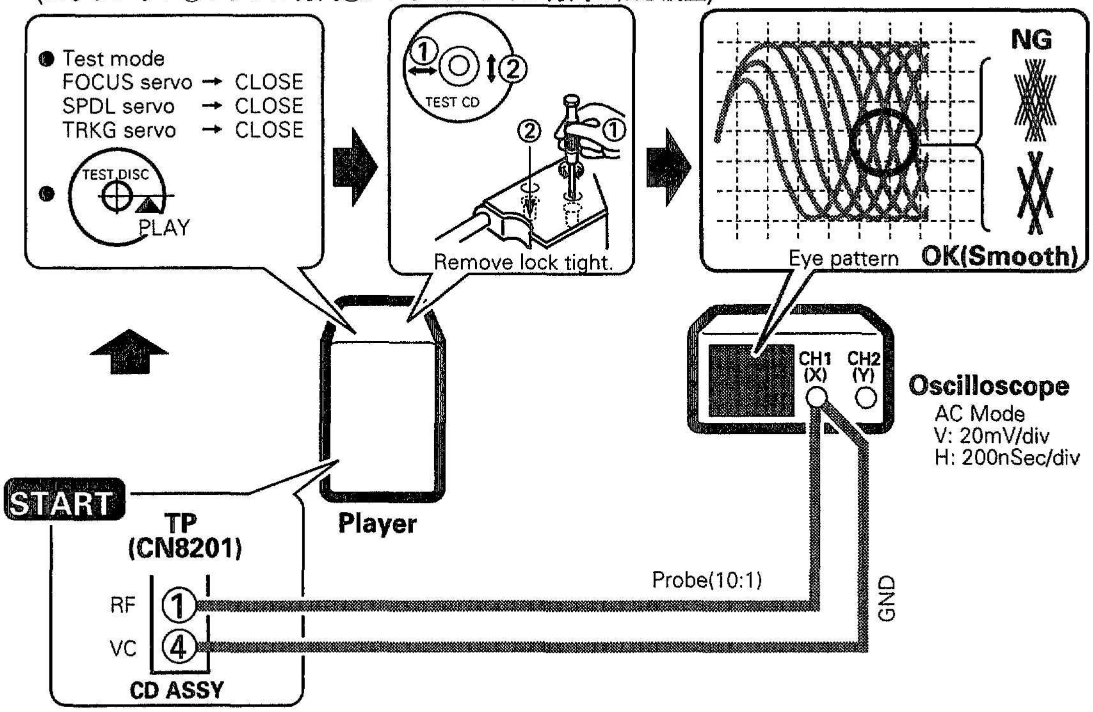
2. Tracking Error Balance Check

(トラッキングエラーバランス確認)


● Test mode
FOCUS servo → CLOSE
SPDL servo → CLOSE
TRKG servo → OPEN
TEST DISC
R=35mm
PLAY
Check
A=B
A
B
GND LEVEL
If not → repair
CH1 (X)
CH2 (Y)
Oscilloscope
DC Mode
V: 50mV/div
H: 5mSec/div
START
Player
TP
(CN8201)
TE
VC
2
4
CD ASSY
Low pass filter
39kΩ
0.001µF
Probe(10:1)
GND

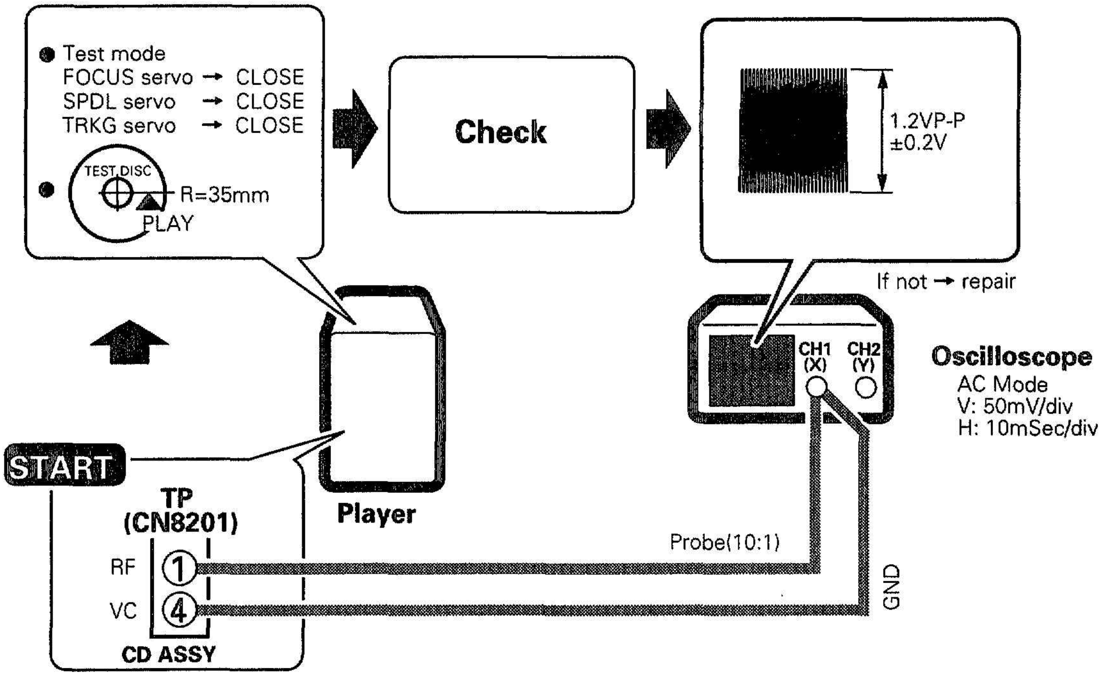
3. PICKUP ①RADIAL / ②TANGENTIAL DIRECTION TILT ADJUSTMENT

(ピックアップ①ラジアル方向②タンジェンシャル方向の傾き調整)


● Test mode
FOCUS servo → CLOSE
SPDL servo → CLOSE
TRKG servo → CLOSE
● TEST DISC
PLAY
①
②
TEST CD
②
①
Remove lock tight.
NG
Eye pattern
OK(Smooth)
START
TP
(CN8201)
RF ①
VC ④
CD ASSY
Player
Probe(10:1)
GND
CH1 (X)
CH2 (Y)
Oscilloscope
AC Mode
V: 20mV/div
H: 200nSec/div

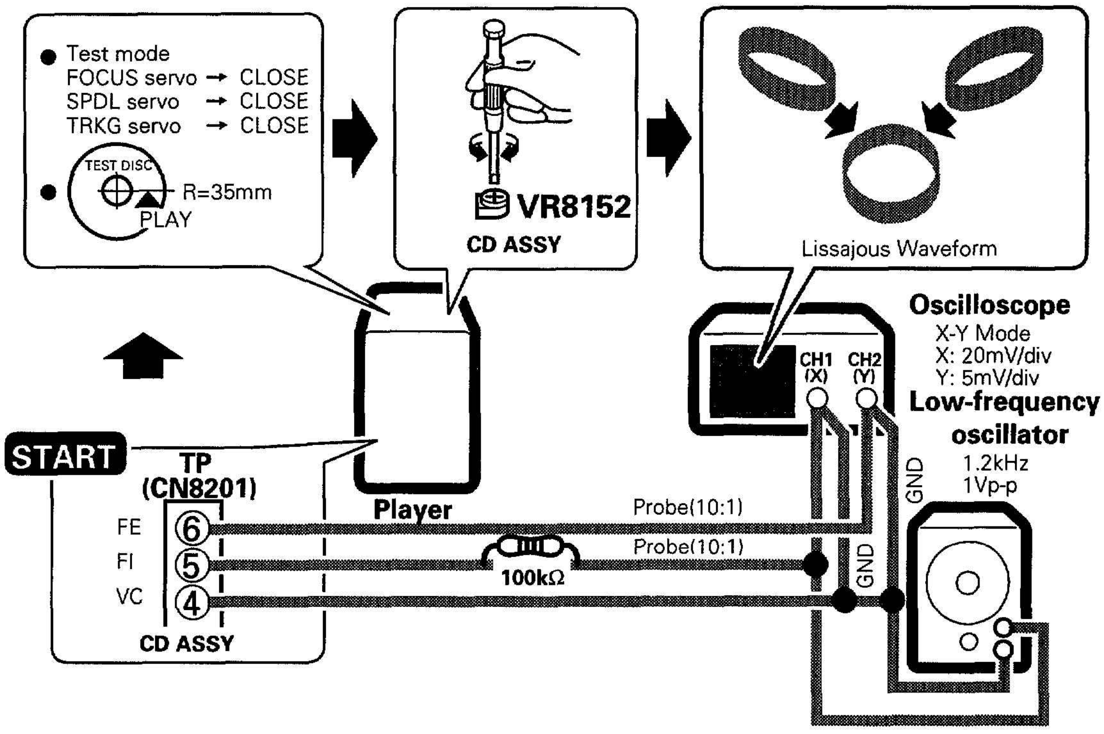
4. RF LEVEL CHECK

(RFレベル確認)


● Test mode
FOCUS servo → CLOSE
SPDL servo → CLOSE
TRKG servo → CLOSE
● TEST DISC
R=35mm
PLAY
Check
1.2VP-P
±0.2V
If not → repair
START
TP
(CN8201)
RF ①
VC ④
CD ASSY
Player
Probe(10:1)
GND
CH1 (X)
CH2 (Y)
Oscilloscope
AC Mode
V: 50mV/div
H: 10mSec/div

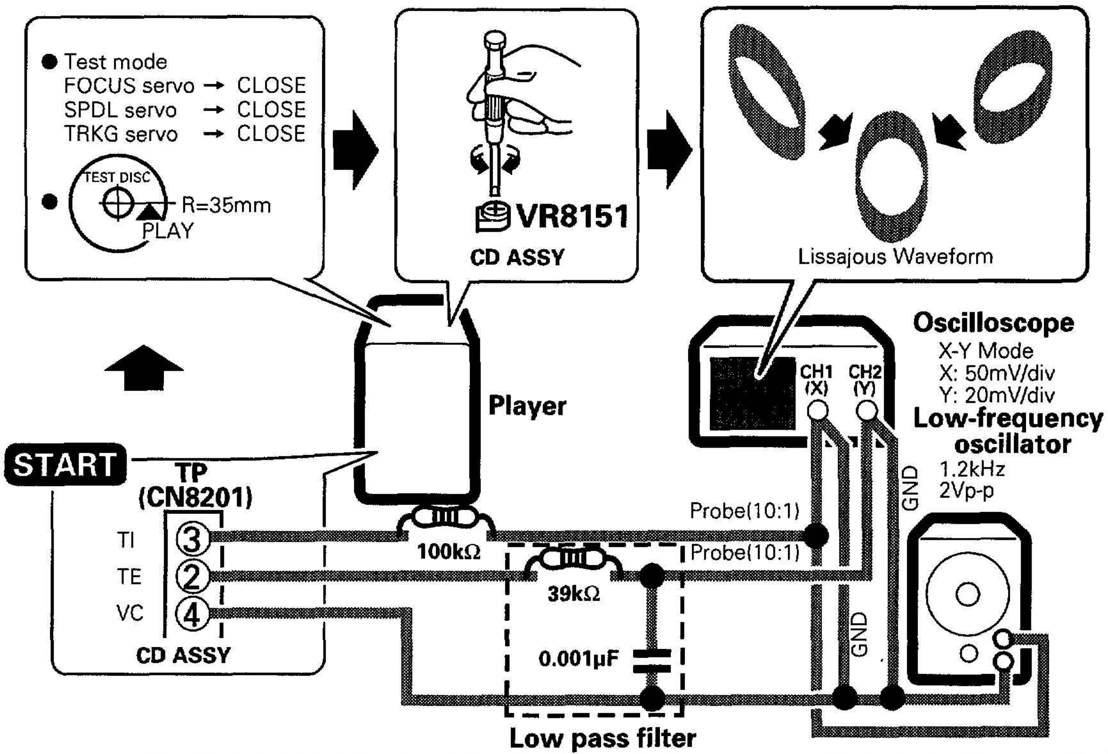
5. Focus Servo Loop Gain Adjustment

(フォーカスサーボループゲイン調整)


● Test mode
FOCUS servo → CLOSE
SPDL servo → CLOSE
TRKG servo → CLOSE
● TEST DISC
R=35mm
PLAY
VR8152
CD ASSY
Lissajous Waveform
Oscilloscope
X-Y Mode
X: 20mV/div
Y: 5mV/div
CH1 (X)
CH2 (Y)
Low-frequency oscillator
1.2kHz
1Vp-p
GND
START
TP (CN8201)
FE ⑥
FI ⑤
VC ④
CD ASSY
Player
Probe(10:1)
Probe(10:1)
100kΩ
GND

6. Tracking Servo Loop Gain Adjustment

(トラッキングサーボループゲイン調整)


● Test mode
FOCUS servo → CLOSE
SPDL servo → CLOSE
TRKG servo → CLOSE
● TEST DISC
R=35mm
PLAY
VR8151
CD ASSY
Lissajous Waveform
Oscilloscope
X-Y Mode
X: 50mV/div
Y: 20mV/div
CH1 (X)
CH2 (Y)
Low-frequency oscillator
1.2kHz
2Vp-p
GND
Player
START
TP (CN8201)
TI ③
TE ②
VC ④
CD ASSY
Probe(10:1)
Probe(10:1)
100kΩ
39kΩ
0.001μF
GND
Low pass filter

8. IC INFORMATION

- The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.

■ PD4756A (IC8001 : CD ASSY)

● CD, Tuner, DSP Control Microcomputer

● Pin Function

No.	Pin Name	I/O	Function CD/TUNER	Description	No.	Pin Name	I/O	Function CD/TUNER	Description
1	P15	I	TUNER	RDS ID	35	P57	O	CD	LEDR * LED Red L : lights (LED レッド L : 点灯)
2	P16	I	TUNER	RDS DATA	36	P60	I	CD	EJECT * L : Complete return (L : リターン完)
3	P17	O	TUNER	RDS MUTE	37	P61	I	CD	CLMP * L : Complete clamp (L : クランプ完)
4	AVss	-	—	GND	38	P62	I	CD	HOME * L : Home position (L : ホーム位置)
5	P130	O	CD	DOOR IN *1	39	P63	I	CD	PIS1
6	P131	O	CD	DOOR OUT *1	40	P64	I	CD	PIS2
7	AVref1	-	—	+5V	41	P65	I	CD	P1S3
8	P70	I	TUNER	PLL DATA IN	42	P66	I	CD	P1S4
9	P71	O	TUNER	PLL DATA OUT	43	P67	I	CD	INSD *L : Carridge inside
10	P72	O	TUNER	PLL DATA CLK	44	P30	I/O	—	SB R/E
11	S11	I	CD	SQSO	45	P31	I/O	—	SB DATA
12	S01	O	CD	CD LSI DATA	46	P32	O	CD	LDON *L : LD ON
13	SCK 1	O	CD	CD LSI CLK	47	P33	O	CD	DSLT *2
14	P23/STB	O	—	NC	48	P34	O	CD	DSRT *2
15	P24	O	TUNER	PLL CE	49	P35	O	CD	L IN *3
16	P25	O	TUNER	TX MUTE	50	P36	O	CD	L OUT *3
17	S00	O	—	DISP DATA	51	P37	I	CD	D CNT
18	SCK0	O	—	DISP CLK	52	P120/RTP0	O	—	NC
19	P40	O	CD	XLAT	53	P121	I	CD	DOOR CLOSE * L : Complete close (L : クローズ完)
20	P41/AD1	O	—	NC	54	P122	I	CD	DOOR OPEN * L : Complete open (L : オープン完)
21	P42/AD2	O	—	NC	55	P123	O	CD	OUT 1 *4
22	P43/AD3	O		NC	56	P124	O	CD	IN 1 *4
23	P44/AD4	O	—	NC	57	P125	O	CD	XRST
24	P45/AD5	O	—	NC	58	P126	O	CD	MUTE
25	P46/AD6	O	—	NC	59	P127	O	CD	XTAL ON/OFF
26	P47/AD7	O	—	NC	60	RESET	-	—	RESET
27	P50/A8	O	—	NC	61	INTP0	I	TUNER	RDS CLK
28	P51/A9	O	—	NC	62	INTP1	I	—	SB CLK
29	P52	I	CD	GFS	63	INTP2	I	CD	SCOR
30	P53	I	CD	SENS	64	INTP3	I	—	AC WAVE
31	P54	O	—	RESET OUT * System microprossor hard reset output. (システムマイコンリセット出力)	65	P04/INTP4	-	—	NC
					66	P05/INTP5	-	—	NC
32	P55	I	—	POWER ON/OFF	67	P06/INTP6	-	—	NC
33	Vss	-	—	GND	68	Vdd	-	—	+5V
34	P56	O	CD	LEDG * LED Green L : lights (LED グリーン L : 点灯)	69	X2	-	—	*Main system clock (4.19MHz)

No.	Pin Name	I/O	Function CD/TUNER	Description
70	X1	–	—	*Main system clock (4.19MHz)
71	IC	–	—	GND
72	XT2	–	—	NC
73	P07	I	CD	FCOK
74	AVdd	–	—	+5V
75	AVref0	–	—	+5V
76	ANI0	I	—	TEST * Type check when initialising (イニシャライズ時仕向チェック)
77	ANI1	I	—	TEMP * Decide abnormal if below 3.8 (V) at Power ON (Power ON時3.8 (V) 以下異常と判定)
78	ANI2	I	CD	JOG
79	ANI3	I	TUNER	ST/TUNED
80	P14	I	—	MODEL CHECK * L : GS2 system H : GS1 system

*1 Electric door operation
(電動ドア動作)

Operation	Door IN	Door OUT
STOP	L	L
OPEN	L	H
CLOSE	H	L
Setting prohibition	H	H

*2 Select operation
(セレクト動作)

Operation	DSLT	DSRT
STOP	L	L
Right direction (1 → 25)	L	H
Left direction (25 → 1)	H	L
Setting prohibition	H	H

*3 Clamp/return operation
(クランプ/リターン動作)

Operation	L IN	L OUT
STOP	L	L
RETURN	L	H
CLAMP	H	L
Setting prohibition	H	H

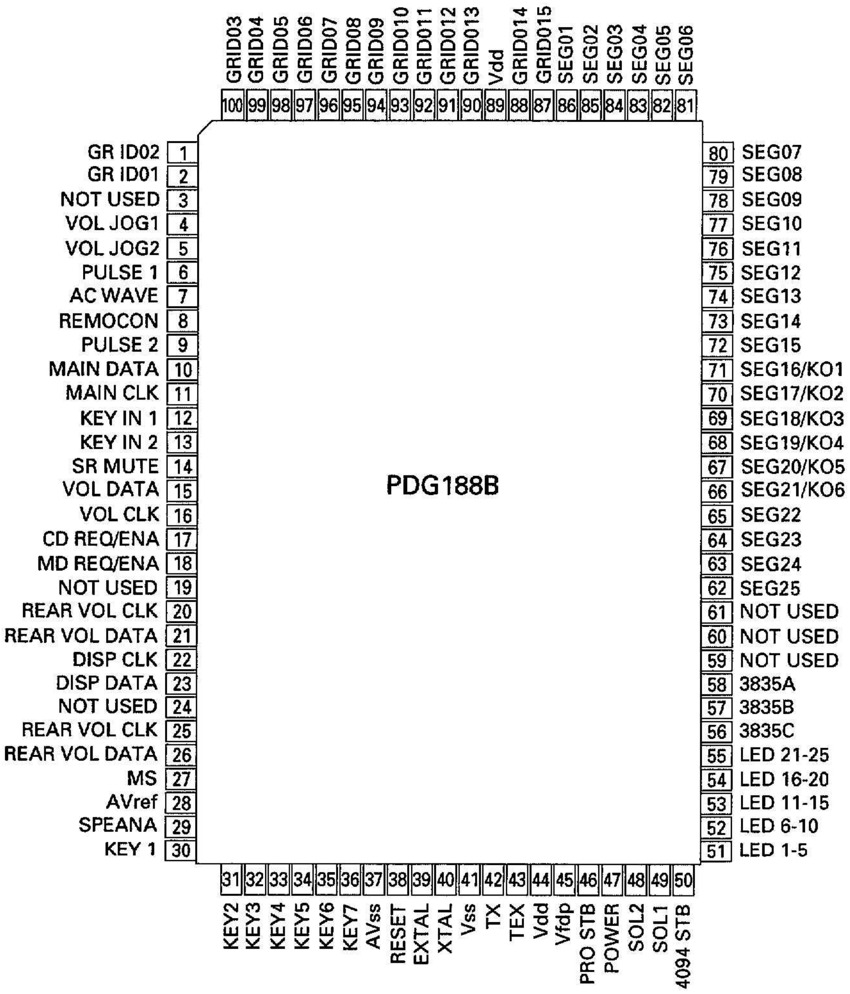
*4 Slot/mechanical operation
(スロット・メカ動作)

Operation	IN 1	OUT 1
STOP	L	L
EJECT	L	H
LOAD	H	L
Setting prohibition	H	H

■ PDG188B (IC2001 : CD DOOR ASSY)

● Display, Deck, Amp Control Microcomputer

● Block Diagram


PDG188B
1 GR ID02
2 GR ID01
3 NOT USED
4 VOL JOG1
5 VOL JOG2
6 PULSE 1
7 AC WAVE
8 REMOCON
9 PULSE 2
10 MAIN DATA
11 MAIN CLK
12 KEY IN 1
13 KEY IN 2
14 SR MUTE
15 VOL DATA
16 VOL CLK
17 CD REQ/ENA
18 MD REQ/ENA
19 NOT USED
20 REAR VOL CLK
21 REAR VOL DATA
22 DISP CLK
23 DISP DATA
24 NOT USED
25 REAR VOL CLK
26 REAR VOL DATA
27 MS
28 AVref
29 SPEANA
30 KEY 1
31 KEY2
32 KEY3
33 KEY4
34 KEY5
35 KEY6
36 KEY7
37 AVss
38 RESET
39 EXTAL
40 XTAL
41 Vss
42 TX
43 TEX
44 Vdd
45 Vfdp
46 PRO STB
47 POWER
48 SOL2
49 SOL1
50 4094 STB
51 LED 1-5
52 LED 6-10
53 LED 11-15
54 LED 16-20
55 LED 21-25
56 3835C
57 3835B
58 3835A
59 NOT USED
60 NOT USED
61 NOT USED
62 SEG25
63 SEG24
64 SEG23
65 SEG22
66 SEG21/KO6
67 SEG20/KO5
68 SEG19/KO4
69 SEG18/KO3
70 SEG17/KO2
71 SEG16/KO1
72 SEG15
73 SEG14
74 SEG13
75 SEG12
76 SEG11
77 SEG10
78 SEG09
79 SEG08
80 SEG07
81 SEG06
82 SEG05
83 SEG04
84 SEG03
85 SEG02
86 SEG01
87 GRID015
88 GRID014
89 Vdd
90 GRID013
91 GRID012
92 GRID011
93 GRID010
94 GRID09
95 GRID08
96 GRID07
97 GRID06
98 GRID05
99 GRID04
100 GRID03

Pin Function

Pin No.	Pin Name	I/O	Description	Pin No.	Pin Name	I/O	Description
1	G1/A1	O	GRID02	41	Vss	–	Connected to GND
2	G0/A0	O	GRID01	42	TX	O	OPEN
3	NC	–	Connected to Vdd	43	TEX	I	Connected to GND
4	PE0/EC0/INT0	I	VOL JOG1	44	Vdd	–	Connected to 5V
5	PE1/EC1/INT1	I	VOL JOG2	45	Vfdp	–	Connected to –30V
6	PE2/INT2	I	PULSE1	46	PD0/A55	O	PRO STB
7	PE3/INT3/NMI	I	AC WAVE	47	PD1/A54	O	POWER
8	PE4/RMC	I	REMOCON	48	PD2/A53	O	SOL 2
9	PE5	I	PULSE2	49	PD3/A52	O	SOL 1
10	PE6/PWM	O	MAIN DATA	50	PD4/A51	O	4094 STB
11	PE7/TO/ADJ	O	MAIN CLK	51	PD5/A50	O	LED 1-5
12	PC0/KR0	I/O	KEY IN 1	52	PD6/A49	O	LED 6-10
13	PC1/KR1	I/O	KEY IN 2	53	PD7/A48	O	LED 11-15
14	PC2/KR2	I/O	SR MUTE	54	PF0/A47	O	LED 16-20
15	PC3/KR3	I/O	VOL DATA	55	PF1/A46	O	LED 21-25
16	PC4/KR4	I/O	VOL CLK	56	PF2/A45	O	3835C
17	PC5/KR5	I/O	CD REQ/ENA	57	PF3/A44	O	3835B
18	PC6/KR6	I/O	MD REQ/ENA	58	PF4/A43	O	3835A
19	PC7/KR7	I/O	Not used	59	PF5/A42	O	Not used
20	PB0/CINT	I/O	REAR VOL CLK	60	PF6/A41	O	Not used
21	PB1/CS0	I/O	REAR VOL DATA	61	PF7/A40	O	Not used
22	PB2/SCK0	I/O	DISP CLK	62	PG0/A39	O	SEG25
23	PB3/SIO	I/O	DISP DATA	63	PG1/A38	O	SEG24
24	PB4/SO0	I/O	Not used	64	PG2/A37	O	SEG23
25	PB5/SCK1	I/O	SB CLK	65	PG3/A36	O	SEG22
26	PB6/SI1	I/O	SB DATA	66	PG4/A35	O	SEG21/KO6
27	PB7/SO1	I/O	MS	67	PG5/A34	O	SEG20/KO5
28	AVref	–	Connected to 5V	68	PG6/A33	O	SEG19/KO4
29	PA0/AN0	I/O	SPEANA	69	PG7/A32	O	SEG18/KO3
30	PA1/AN1	I/O	KEY1	70	PH0/A31	O	SEG17/KO2
31	PA2/AN2	I/O	KEY2	71	PH1/A30	O	SEG16/KO1
32	PA3/AN3	I/O	KEY3	72	PH2/A29	O	SEG15
33	PA4/AN4	I/O	KEY4	73	PH3/A28	O	SEG14
34	PA5/AN5	I/O	KEY5	74	PH4/A27	O	SEG13
35	PA6/AN6	I/O	KEY6	75	PH5/A26	O	SEG12
36	PA7/AN7	I/O	KEY7	76	PH6/A25	O	SEG11
37	AVss	–	Connected to GND	77	PH7/A24	O	SEG10
38	RST	–	RESET	78	A23	O	SEG09
39	EXTAL	I	Connected to osillator (8 MHz)	79	A22	O	SEG08
40	XTAL	O	Connected to osillator (8 MHz)	80	A21	O	SEG07

Pin No.	Pin Name	I/O	Description	Pin No.	Pin Name	I/O	Description
81	A20	O	SEG06	91	G11/A11	O	GRID12
82	A19	O	SEG05	92	G10/A10	O	GRID11
83	A18	O	SEG04	93	G9/A9	O	GRID10
84	A17	O	SEG03	94	G8/A8	O	GRID09
85	A16	O	SEG02	95	G7/A7	O	GRID08
86	G15/A15	O	SEG01	96	G6/A6	O	GRID07
87	G14/A14	O	GRID15	97	G5/A5	O	GRID06
88	G13/A13	O	GRID14	98	G4/A4	O	GRID05
89	Vdd	–	Connected to 5V	99	G3/A3	O	GRID04
90	G12/A12	O	GRID13	100	G2/A2	O	GRID03

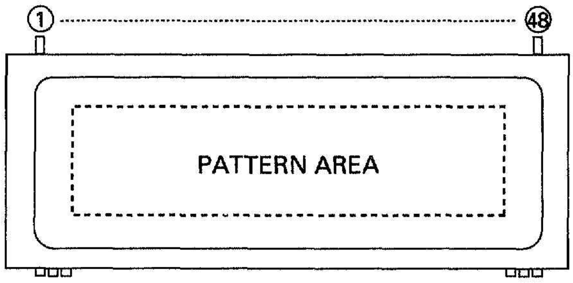
I/O : INPUT/OUTPUT
I : INPUT
O : OUTPUT

9. FL INFORMATION

■ AAV7028 (V2001 : CD DOOR ASSY)

● FL Tube

● Pin Assignment


①
㊽
PATTERN AREA

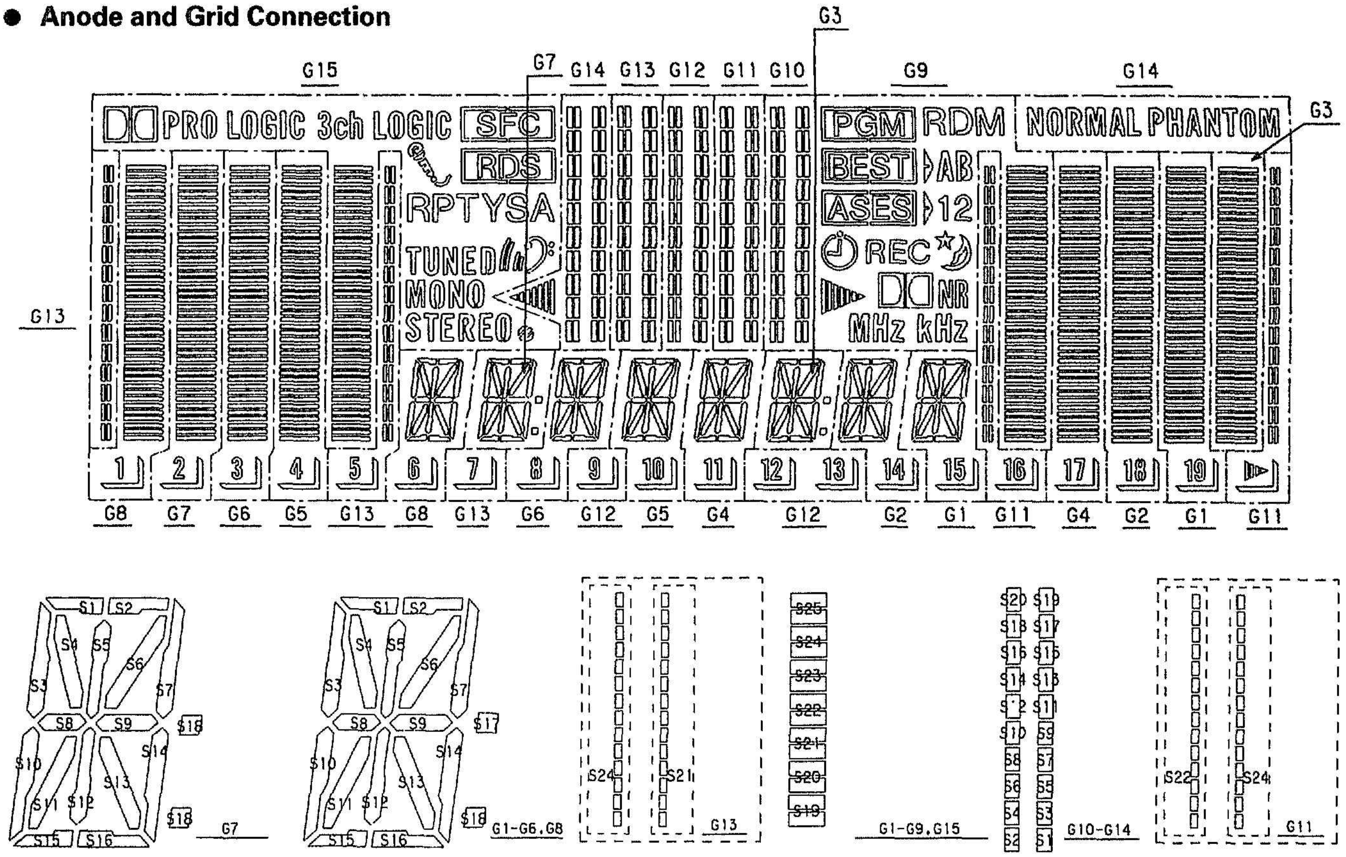
● Pin Connection

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Assignment	F1	F1	F1	D	S25	S24	S23	S22	S21	S20	S19	S18	S17	S16	S15	S14	S13	S12	S11	S10	S9	S8	S7	S6

Pin No.	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
Assignment	S5	S4	S3	S2	S1	G15	G14	G13	G12	G11	G10	G9	G8	G7	G6	G5	G4	G3	G2	G1	H	F2	F2	F2

F1, F2 : Filoment G1-G15 : Grid S1-S25 : Anode D : Connect externaly to F1. (F1に外部接続する。)
H : Usual current grid (ec level = Impress direct current voltage of Typ 31.0 Vdc)
(常時通電グリッド (ecレベル=Typ 31.0 Vdc の直流電圧を印加する。))

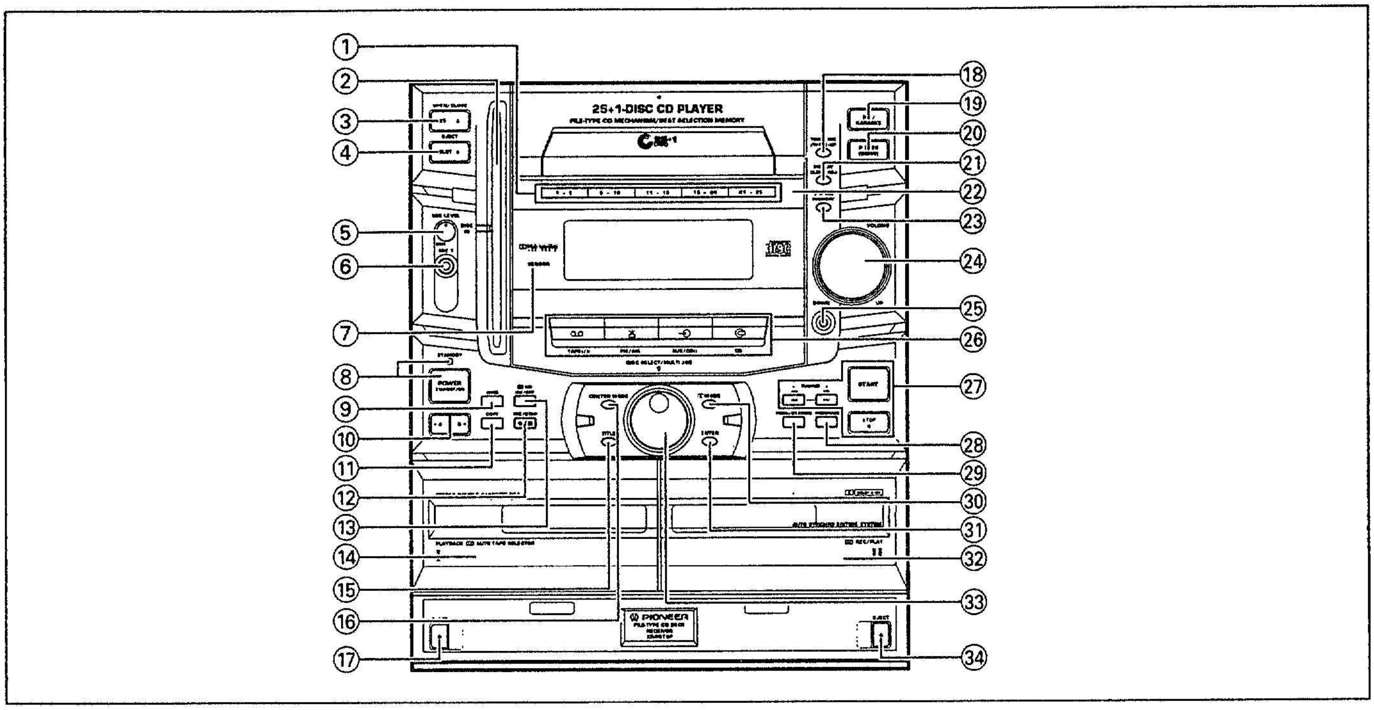
● Anode and Grid Connection


G3
G15
G7
G14
G13
G12
G11
G10
G9
G14
G3
PRO LOGIC 3ch LOGIC
SFC
RDS
RPT
Y
S
A
TUNED
MONO
STEREO
PGM
RDM
BEST
AB
ASES
12
REC
NR
MHz
kHz
NORMAL
PHANTOM
G13
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
G8
G7
G6
G5
G13
G8
G13
G6
G12
G5
G4
G12
G2
G1
G11
G4
G2
G1
G11
S1
S2
S3
S4
S5
S6
S7
S8
S9
S10
S11
S12
S13
S14
S15
S16
S17
S18
G7
G1-G6,G8
S24
S21
G13
S25
S24
S23
S22
S21
S20
S19
S20
S19
S18
S17
S16
S15
S14
S13
S12
S11
S10
S9
S8
S7
S6
S5
S4
S3
S2
S1
G1-G9,G15
G10-G14
S22
S24
G11

● Anode and Grid Assignment

	G1	G2	G3	G4	G5	G6	G7	G8	G9	G10	G11	G12	G13	G14	GW15
S1	S1	S1	S1	S1	S1	S1	S1	S1	MHz	S1	S1	S1	S1	S1	⊘
S2	S2	S2	S2	S2	S2	S2	S2	S2	KHz	S2	S2	S2	S2	S2	STEREO
S3	S3	S3	S3	S3	S3	S3	S3	S3	▶	S3	S3	S3	S3	S3	MONO
S4	S4	S4	S4	S4	S4	S4	S4	S4	DD NR	S4	S4	S4	S4	S4	𝄢
S5	S5	S5	S5	S5	S5	S5	S5	S5	◷	S5	S5	S5	S5	S5	b
S6	S6	S6	S6	S6	S6	S6	S6	S6	REC	S6	S6	S6	S6	S6	//
S7	S7	S7	S7	S7	S7	S7	S7	S7	☆☾	S7	S7	S7	S7	S7	TUNED
S8	S8	S8	S8	S8	S8	S8	S8	S8	ASES	S8	S8	S8	S8	S8	A
S9	S9	S9	S9	S9	S9	S9	S9	S9	▶12	S9	S9	S9	S9	S9	S
S10	S10	S10	S10	S10	S10	S10	S10	S10	1	S10	S10	S10	S10	S10	Y
S11	S11	S11	S11	S11	S11	S11	S11	S11	2	S11	S11	S11	S11	S11	T
S12	S12	S12	S12	S12	S12	S12	S12	S12	BEST	S12	S12	S12	S12	S12	P
S13	S13	S13	S13	S13	S13	S13	S13	S13	▶AB	S13	S13	S13	S13	S13	R
S14	S14	S14	S14	S14	S14	S14	S14	S14	A	S14	S14	S14	S14	S14	RDS
S15	S15	S15	S15	S15	S15	S15	S15	S15	B	S15	S15	S15	S15	S15	🎤
S16	S16	S16	S16	S16	S16	S16	S16	S16	PGM	S16	S16	S16	S16	S16	SFC
S17	19	18	○(UP)	17	4	3	2	1	RDM	S17	S17	S17	S17	S17	3ch LOGIC
S18	15	14	○(DOWN)	11	10	8	○○	6		S18	S18	S18S	S18	S18	DD PRO LOGIC
S19	S19	S19	S19	S19	S19	S19	S19	S19	S19	S19	S19	S19	S19	S19	S19
S20	S20	S20	S20	S20	S20	S20	S20	S20	S20	S20	S20	S20	S20	S20	S20
S21	S21	S21	S21	S21	S21	S21	S21	S21	S21			12	S21		S21
S22	S22	S22	S22	S22	S22	S22	S22	S22	S22		S22	13			S22
S23	S23	S23	S23	S23		S23	S23	S23	S23		16	9	5	◀	S23
S24	S24	S24	S24	S24	S24	S24	S24	S24	S24		S24		S24	NORMAL	S24
S25	S25	S25	S25	S25	S25	S25	S25	S25	S25		▶		7	PHANTOM	S25

10. PANEL FACILITIES



① **5-DISC ACCESS button**

② **Plus 1 disc slot**

③ **25 OPEN/CLOSE button**

④ **SLOT EJECT button**

⑤ **Microphone level (MIC LEVEL)**

⑥ **Microphone jack**

⑦ **Remote sensor**

⑧ **POWER STANDBY/ON switch and STANDBY indicator**

This is the switch for electric power.

ON : When set to the ON position, power is supplied and the unit becomes operational.

STANDBY : When set to the STANDBY position, the main power flow is cut and the unit is no longer fully operational. A minute flow of power feeds the unit to maintain operation readiness. (The STANDBY indicator lights.)

⑨ **ASES button**

⑩ **BEST (A, B) button**

⑪ **COPY button**

⑫ **REC/STOP button (●/■)**

⑬ **Dolby* NR ON/OFF button**

Each time this button is pressed, the Dolby NR system turns on and off.

⑭ **TAPE I cassette door**

⑮ **TITLE button**

⑯ **CENTER MODE button**

⑰ **TAPE I Eject button (⏏)**

**........This knob is used for multi-functions.

⑱ **TIMER REC/WAKE-UP button**

⑲ **SFC/KARAOKE button**

Each time this button is pressed, the mode changes in the following sequence:

→ HALL → MOVIE → LIVE
off ← KARAOKE ← DISCO ←

NOTE:
If KARAOKE is selected, the vocal part in songs is muted and only the instrumental accompaniment (backup) is played.

⑳ **P.BASS (DEMO) button**

㉑ **DISPLAY CLOCK ADJ button**

㉒ **Door panel**

㉓ **STATION MEMORY button**

㉔ **VOLUME control**

㉕ **Headphones jack (PHONES)**

㉖ **Function buttons**

㉗ **Common operation button section**

㉘ **PROGRAM button**

㉙ **FREQ/STATION button**

㉚ **ᗡD MODE button**

㉛ **ENTER button**

㉜ **TAPE II cassette door**

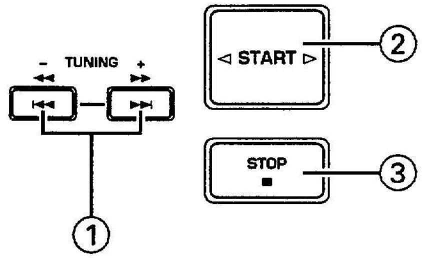
㉝ **DISC SELECT/MULTI JOG** knob**

㉞ **TAPE II Eject button (⏏)**

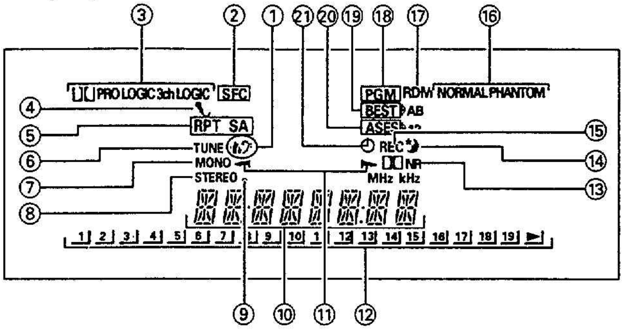
*

- *Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.*
- *"DOLBY" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.*

Common operation button section



Display



① ⏮, ⏭ buttons

② START button (◀ ▶)

③ STOP button (■)

- Roles of the common operation buttons (The roles of the buttons vary depending on the input functions as shown below.)

During CD input
START : Play/pause button
STOP : Stop button
⏭ : Fast forward/track search button
⏮ : Fast reverse/track search button

During cassette deck input
START : Play button/Tape transport direction
STOP : Stop button
⏭ : Fast forward/Review button
⏮ : Rewind/Review button

During tuner operation
⏭ : Frequency Up button
⏮ : Frequency Down button

① Lights when you press the P.BASS button.

② Lights during SFC mode operation.

③ Lights during Dolby Pro Logic* or 3ch Logic.

④ Lights during KARAOKE mode operation.

⑤ RPT : Lights during repeat play.
S : Lights during SINGLE mode operation.
A : Lights during ALL mode operation.

⑥ Lights during radio broadcast reception.

⑦ Lights when you press the MONO button.

⑧ Lights during FM stereo reception.

⑨ Lights when setting the Beat Cut function.

⑩ Indicates frequency and major operation status.

⑪ Lights to show tape direction.

⑫ Displays a CD track number. Playing track number and waiting track numbers are displayed. In program play, lights the programmed tracks. ▶ lights when programmed tracks are more than 20.

⑬ Lights when Dolby NR is ON.

⑭ Lights during sleep timer operation.

⑮ Lights during recording and timer recording operation.

⑯ Lights during Dolby Surround Center Mode. Fixed to NORMAL position in Dolby 3ch Logic.

⑰ Lights when you press the RANDOM button.

⑱ Lights when you press the PGM button.

⑲ Flashes during Best Selection setting (A or B), and lights during play.

⑳ Lights when setting up A.S.E.S.

㉑ Lights when setting the timer.

*
Manufactured under license from Dolby Laboratories Licensing Corporation.
DOLBY, the double-D symbol and "PRO LOGIC" are trademarks of Dolby Laboratories Licensing Corporation.

11. SPECIFICATIONS

■ STEREO FILE-TYPE CD CASSETTE DECK RECEIVER:

Amplifier Section

Continuous Power Output (RMS)	
XR-P970F	
FRONT	100 W + 100 W (1 kHz, T.H.D. 10 %, 8 Ω)
CENTER, REAR	20 W (1 kHz, T.H.D. 10 %, 4 Ω)
XR-P770F	100 W + 100 W (1 kHz, T.H.D. 10 %, 8 Ω)

FM Tuner Section

Reception frequencies	87.5 MHz to 108 MHz
Antenna input	75 Ω unbalanced

AM Tuner Section

Reception frequencies	531 kHz to 1,602 kHz (9 kHz step) 530 kHz to 1,700 kHz (10 kHz step)
Antenna	Loop antenna (included)

Double Cassette Deck Section

System type	4-track, 2-channel stereo
Heads	Recording/playback head x 1 Playback head x 1 Erasing head x 1
Motor	DC servo motor x 1
Frequency response	
Type II (High/CrO2) tape	*35 Hz to 15,000 Hz ±6 dB (recorded at –20 dB)
Type I (Normal) tape	*35 Hz to 14,000 Hz ±6 dB (recorded at –20 dB)
SN ratio	*56 dB (peak recording level, audible compensation)
Dolby B type NR on	10 dB compensation at 5 kHz

* Values measured in accordance with EIAJ standards.

■ FILE TYPE CD PLAYER

Type	Compact disc audio system
Usable discs	Compact audio discs
Channels	2 channels (stereo)
Program steps	32 steps maximum

■ ELECTRICAL REQUIREMENTS, ETC.

Power Requirements	AC 240 V, 50 Hz
Power Consumption	
XR-P970F	510 W
XR-P770F	530 W
External dimensions	260 (W) x 310 (H) x 371.5 (D) mm
Weight	11 kg

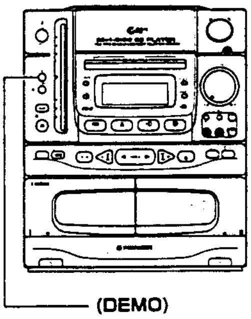
■ ACCESSORIES

Operating Instructions	1
FM T-type antenna	1
AM loop antenna	1
Remote control unit	1
AA/R6P dry cell batteries	2
Speaker cords (supplied with speaker system)	2
CD case stand	1

NOTE:
Specifications and design are subject to possible modifications without notice, due to improvements.

Service Manual

PIONEER®
The Art of Entertainment



PION-04890

SERVICE GUIDE

ORDER NO.
RRV1430

STEREO FILE-TYPE CD CASSETTE DECK RECEIVER

XR-P760F

CONTENTS

1. DISASSEMBLY 2
2. HOW TO DIAGONISE CIRCUIT WHEN PRIMARY FUSE BLOWS 9
3. FLOW CHART 15
4. BLOCK DIAGRAM 26

PIONEER ELECTRONIC CORPORATION 4-1, Meguro 1-Chome, Meguro-ku, Tokyo 153, Japan
PIONEER ELECTRONICS SERVICE INC. P.O. Box 1760, Long Beach, CA 90801-1760, U.S.A.
PIONEER ELECTRONIC [EUROPE] N.V . Haven 1087 Keetberglaan 1, 9120 Melsele, Belgium
PIONEER ELECTRONICS ASIACENTRE PTE. LTD. 501 Orchard Road, #10-00 Lane Crawford Place, Singapore 0923

© PIONEER ELECTRONIC CORPORATION 1995
T-DFK NOV. 1995 Printed in Japan

4890

1. DISASSEMBLY (各部のはずしかた)

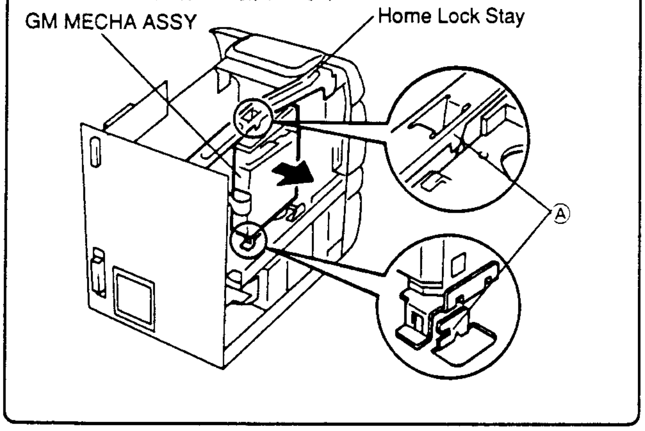
■ REMOVING THE GM MECHA ASSY (GMメカASSYのはずしかた)

NOTE : Before removing the GM Mecha Assy, make sure you turn the power OFF and disconnect the AC power cord.

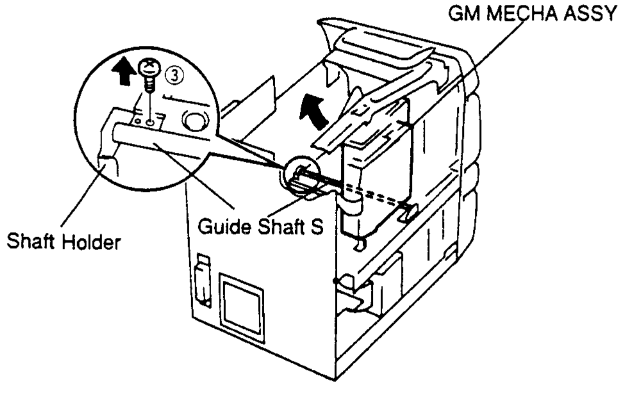
(注意: はずす前に必ず電源を切ってから電源コードを抜いてください。)

① Remove the bonnet. (Since the front of the home lock stay makes contact, hold the bonnet in that place and pull and lift at the same time.)
(ボンネットをはずす。ホームロックステイのフロント側があたるので、その箇所のボンネットを持ち上げながら引く。)

② Move the GM Mecha ASSY to the right (viewed from the rear), watching out for the 2 Lock locations (partⒶ).
(GMメカASSYをロック2ケ所(Ⓐ部)を解除して、リア側から見て右端に移動する。)


GM MECHA ASSY
Home Lock Stay
Ⓐ

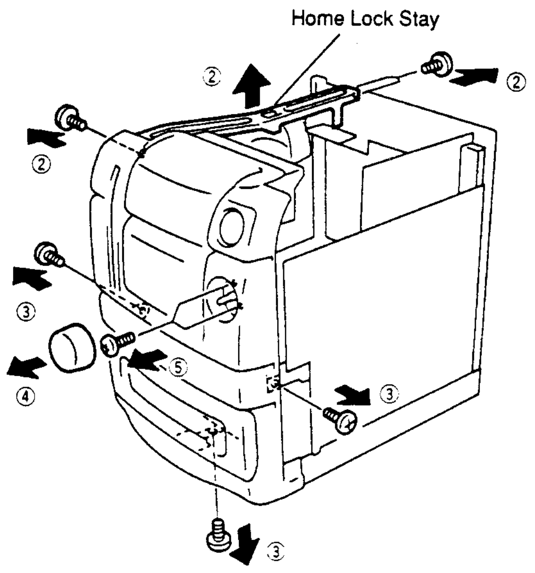
③ Remove the shaft holder that fixes guide shaft S in place (screw ③), and remove the GM Mecha ASSY together with guide shaft S.
(ガイドシャフトSを固定しているシャフトフォルダーをはずし(ネジ③) ガイドシャフトSごとGMメカASSYをはずす。)


GM MECHA ASSY
③
Shaft Holder
Guide Shaft S

■ REMOVING THE FRONT PANEL (フロントパネルのはずしかた)

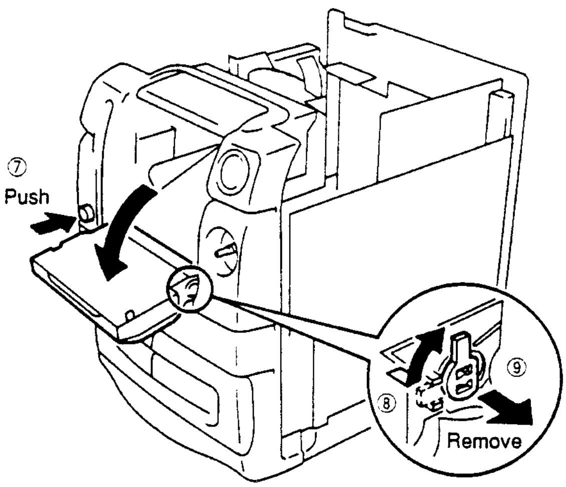
① Remove the bonnet.
(ボンネットをはずす。)

②-⑤


Home Lock Stay
②
②
②
③
④
⑤
③
③

⑥ Remove the HEADPHONE ASSY wire rod.
(HEADPHONE ASSYの線材をはずす。)

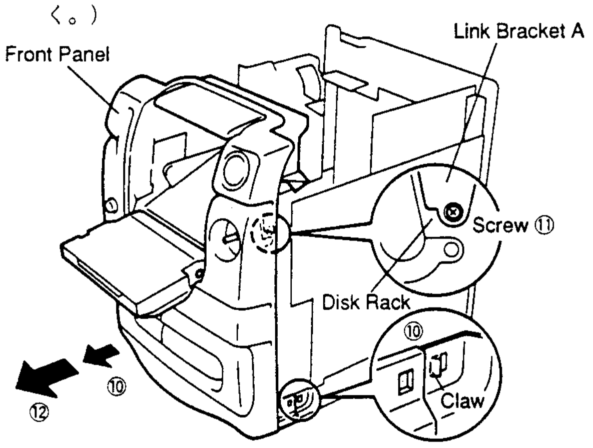
⑦-⑨


⑦
Push
⑨
⑧
Remove

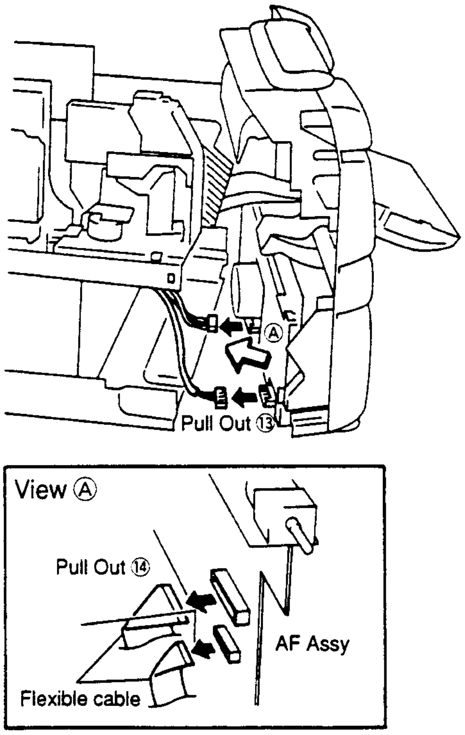
⑩ Shift the front panel slightly toward you, being cautious of the left and right catches on the chassis and sub chassis.
（フロントパネルをシャーシとサブシャーシの左右のツメに注意しながら手前に少しずらす。）

⑪ Remove screw ⑪ and remove link bracket A from the disc rack.
（ネジ⑪をはずしてディスクラックからリンクカナグAをはずす。）

⑫ Pull the front panel further toward you, and remove it from the chassis.
（フロントパネルをさらに手前に引き、シャーシから抜く。）


Front Panel
Link Bracket A
Screw ⑪
Disk Rack
⑩
Claw
⑩
⑫

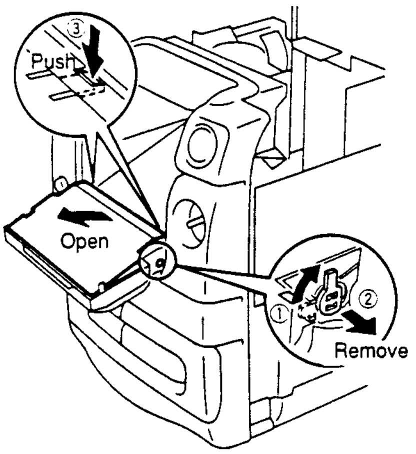
⑬, ⑭


Ⓐ
Pull Out ⑬
View Ⓐ
Pull Out ⑭
AF Assy
Flexible cable

■ MICRO COMPUTER IC REPLACEMENT METHOD
(マイコンICの交換方法)

①, ②, ③

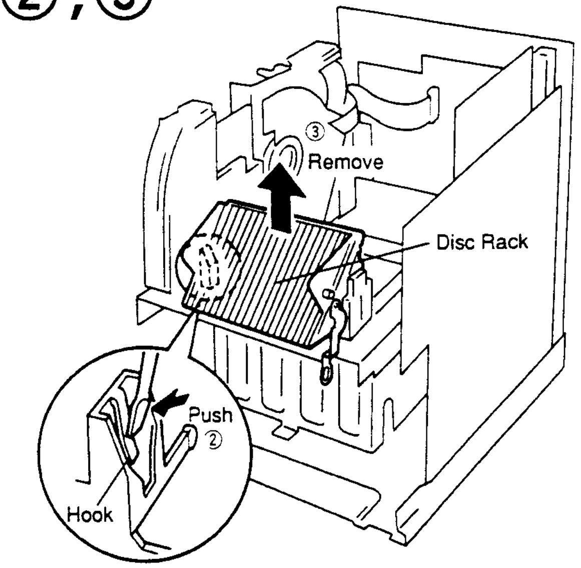
The micro computer IC can be easily replaced when the front panel has been removed.


③
Push
Open
①
②
Remove

■ REMOVING THE DISC RACK
(ディスクラックのはずしかた)

① Remove the front panel.
（フロントパネルをはずす。）

②, ③


③
Remove
Disc Rack
Push
②
Hook

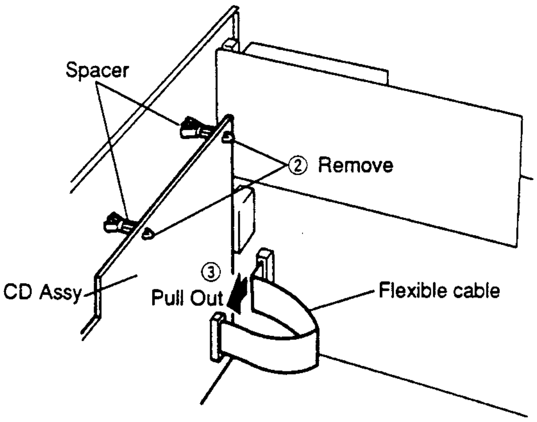
■ REMOVING THE POWER AMP MODULE (パワーアンプモジュールのはずしかた)

①

Remove the bonnet and home lock stay.
(Refer to "■ Removing the Front Panel")
(ボンネットとホームロックステイをはずす。)
("フロントパネルのはずしかた"参照)

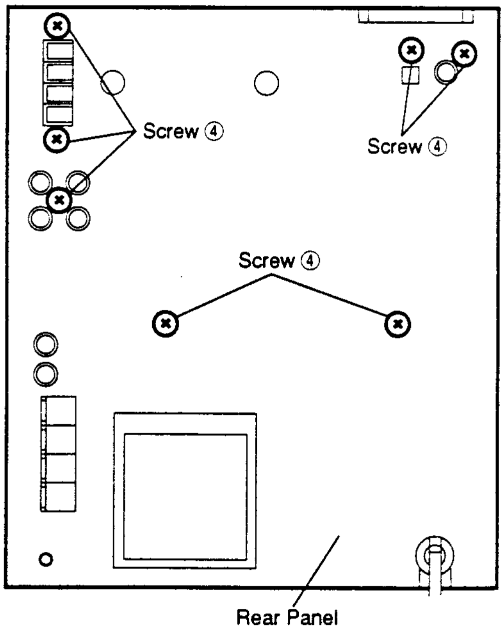
②,③

Remove the spacer from the CD ASSY.
(CD ASSYからロッキングカードスペーサをはずす。)


Spacer
② Remove
CD Assy
③
Pull Out
Flexible cable

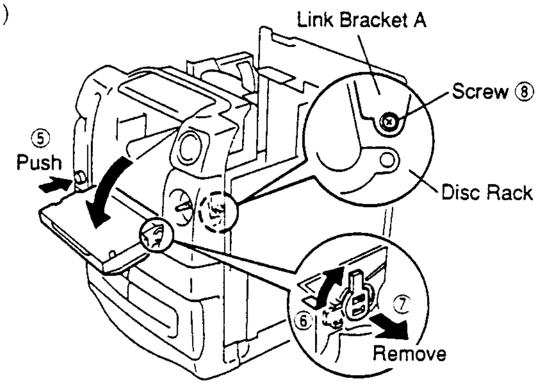
④

Remove the rear panel (screw ④ x 7).
(リアパネルをはずす。(ネジ④ 7本))


Screw ④
Screw ④
Screw ④
Rear Panel

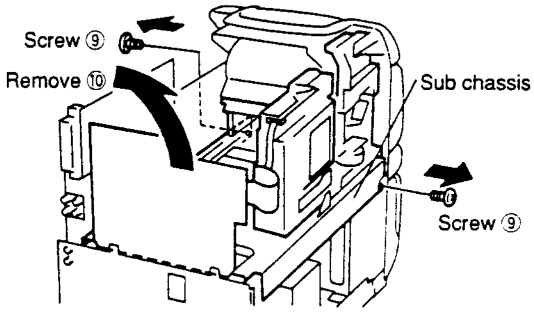
⑤-⑧

Remove screw ⑧ and remove link bracket A from the disc rack.
(ネジ⑧をはずしてディスクラックからリンクカナグAをはずす。)

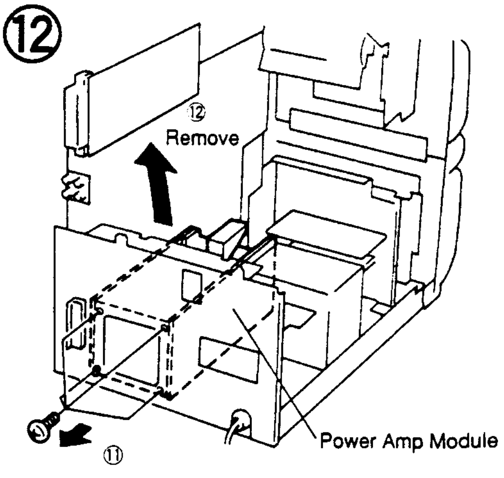

Link Bracket A
Screw ⑧
⑤
Push
Disc Rack
⑥
⑦
Remove

⑨,⑩

Remove screw ⑨ and remove the sub chassis together with the GM Slot-In Mecha ASSY and the GM Mecha ASSY.
(ネジ⑨をはずしてGMスロットインメカ、GMメカごとサブシャーシをはずす。)

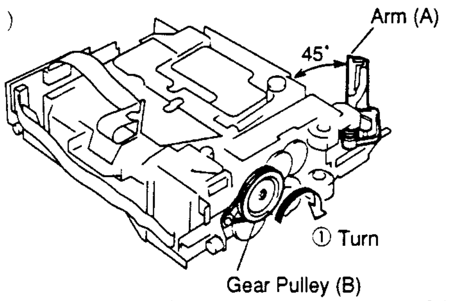

Screw ⑨
Remove ⑩
Sub chassis
Screw ⑨

⑪,⑫

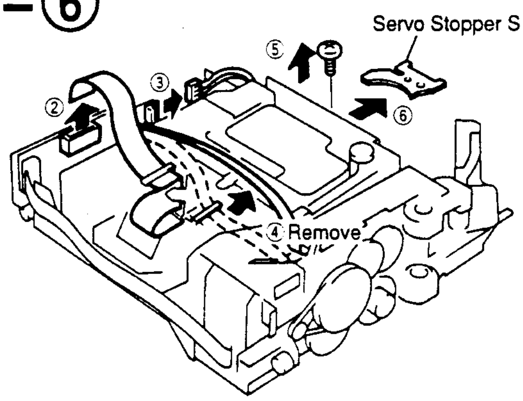

⑫
Remove
Power Amp Module
⑪

■ REMOVING THE SERVO MECHANISM ASSY GM
(サーボメカASSY GMのはずしかた。)

① Turn gear pulley (B) and position Arm (A) as shown below.
（ギアプーリーBを回して、アームAを下図の位置にする。）

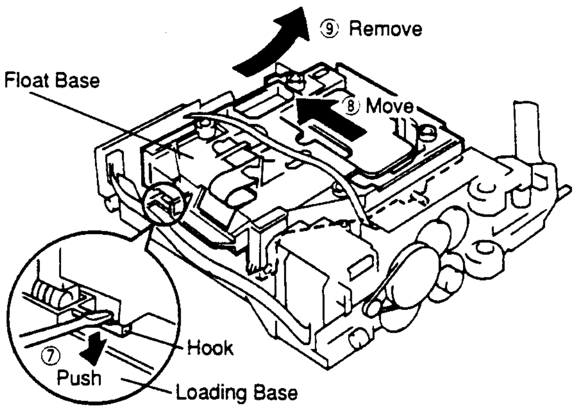

Arm (A)
45°
① Turn
Gear Pulley (B)

②-⑥


Servo Stopper S
⑤
③
②
⑥
④ Remove

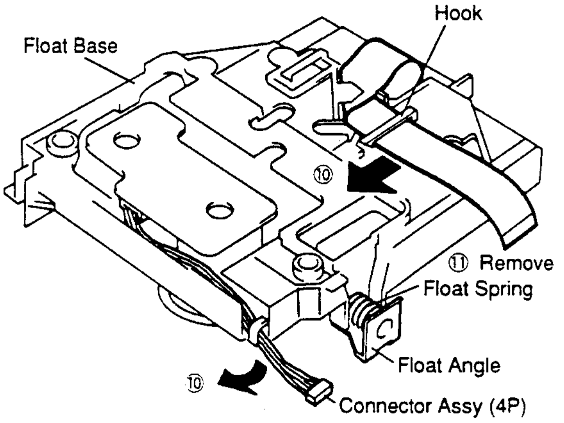
⑦-⑨

Slide the float base in the direction of the arrow ⑧ while pressing down on the loading base hook, and, lifting it gently, pull it out in the direction of the arrow ⑨.
（ローディングベースのフックを下に押しながらフロートベースを矢印⑧方向にスライドさせ、かるく持ち上げながら矢印⑨方向に引き抜く。）

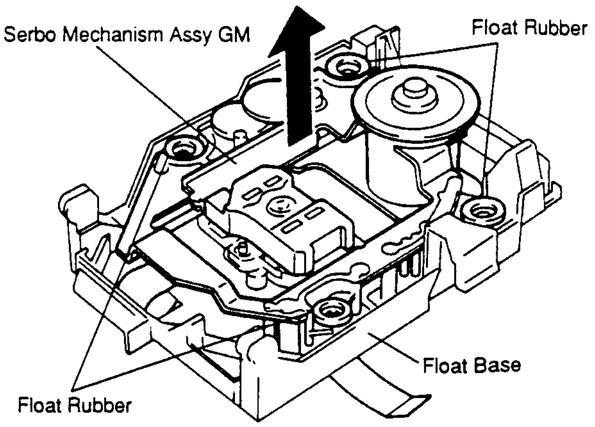

⑨ Remove
Float Base
⑧ Move
⑦
Push
Hook
Loading Base

⑩ Remove the Pickup ASSY flexible cable and the connector ASSY (4P) from the float base.
（ピックアップASSYのフレキシブルケーブルとコネクタASSY(4P)をフロートベースのフックからはずす。）

⑪ Remove the float spring. (To install this part, line up the float angle side of the Servo Mechanism ASSY GM first, and press down on the float base side.)
（フロートスプリングをはずす。）（取り付ける時は、サーボメカASSY GMのフロートアングル側を先に合わせフロートベース側を下に押し込むとよい）


Hook
Float Base
⑩
⑪ Remove
Float Spring
Float Angle
⑩
Connector Assy (4P)

⑫ Remove the float rubber from the Servo Mechanism ASSY GM. At this time the float rubber should remain on the float base side. (To install it on the float base when it has been removed, push it into place with a thin cylindrical object.
（フロームゴムからサーボメカASSY GMをはずす。この時フローゴムはフロートベース側に残すこと。）（はずれたとき、フロートベースに取付けるには細い棒状のもので押し込むと入る。）

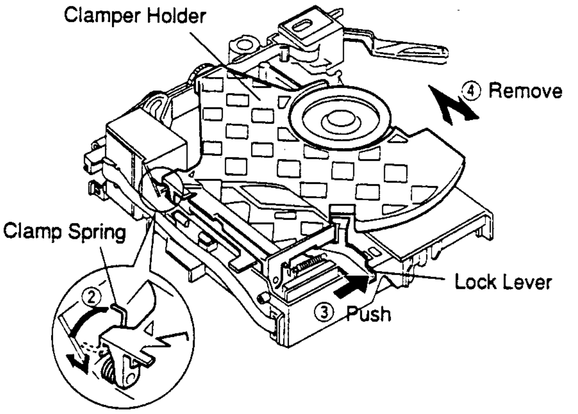

Serbo Mechanism Assy GM
Float Rubber
Float Base
Float Rubber

■ REMOVING THE ARM (A) (アーム(A)のはずしかた)

① Remove the float base together with the Servo Mechanism ASSY GM. (Refer to Steps ①–⑨ for "■ Removing the Servo Mechanism ASSY GM" .)
(サーボメカASSY GMごとフロートベースをはずす(サーボメカASSYのはずしかた①-⑨参照。)

②–④

Remove the clamp spring and remove the clamp holder while pressing down on the lock lever.
(クランプスプリングをはずし、ロックレバーを押しながらクランパーホルダーをはずす。)

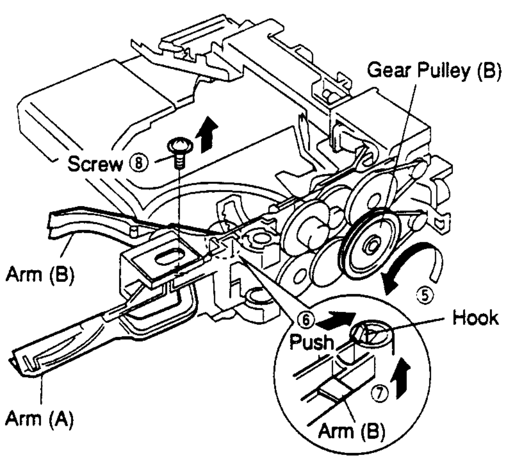

Clamper Holder
④ Remove
Clamp Spring
②
Lock Lever
③ Push

⑤ Turn gear pulley (B) and position Arm (A) as shown below.
(ギアプーリー(B)を回して、アーム(A)を下図の位置にする。)

⑥,⑦

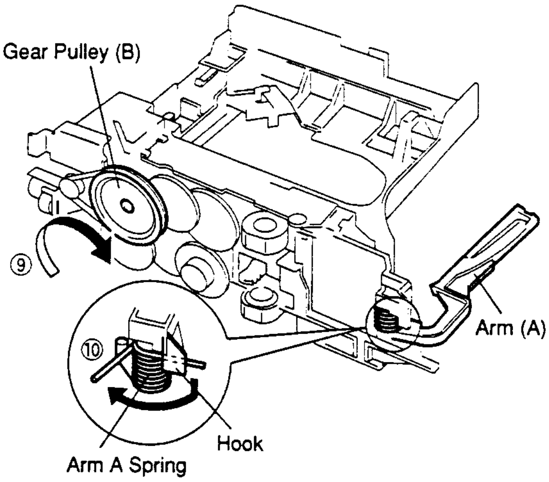
Remove Arm (B) while pressing the hook in the direction of the arrow.
(フックを矢印方向に押しながらアーム(B)をはずす。)

⑧ Remove screw ⑧. (ネジ⑧をはずす。)

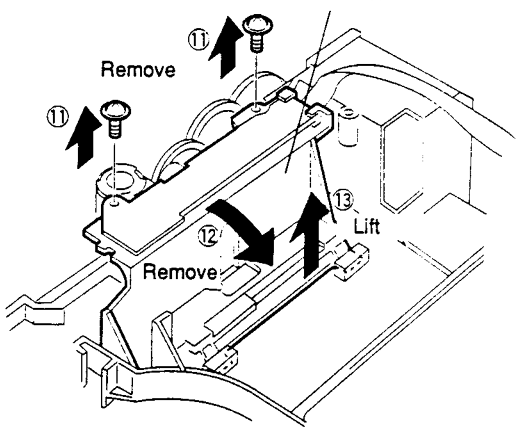

Gear Pulley (B)
Screw ⑧
Arm (B)
⑤
Hook
⑥
Push
⑦
Arm (A)
Arm (B)

⑨ Turn gear pulley (B) and position Arm (A) as shown in below.
(ギアプーリー(B)を回してアーム(A)を下図の位置にする。)

⑩ Remove the Arm A spring from its hook.
(アームAスプリングをフック部からはずす。)


Gear Pulley (B)
⑨
⑩
Arm (A)
Hook
Arm A Spring

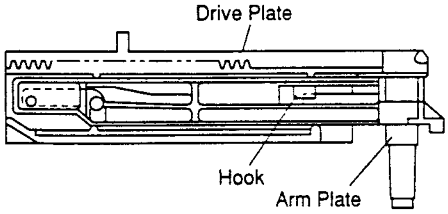
⑪–⑬


Cam Cover
⑪
Remove
⑪
⑫
Remove
⑬
Lift

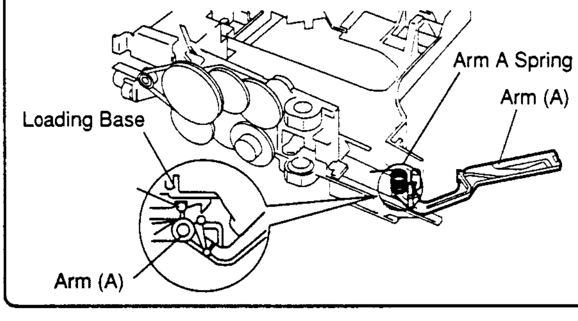
⑭ Remove drive plate, Arm plate, Arm A spring and Arm (A). (Refer to Steps ③-④ on page 7.)
(ドライブプレート、アームプレート、アームAスプリング、アーム(A)をはずす。)(7ページの③-④ 参照)

■ FOR REASSEMBLY, REVERSE THE DISASSEMBLY PROCEDURE, AND IN ADDITION CARRY OUT THE FOLLOWING ITEMS.
(組み立てる時は、はずしかたの手順を逆に行う、但し以下の項目を行うこと。)

① Assemble the arm plate as shown below, watching out for the drive plate hook.
(ドライブプレートのフックに注意して下図の位置にアームプレートを組み合わせる。)

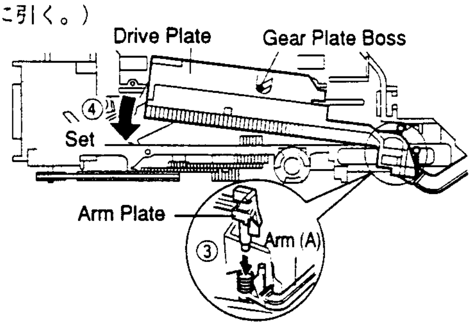

Drive Plate
Hook
Arm Plate

② Place Arm (A) and the Arm A spring on the loading base, being careful to keep them in the position shown in below.
(アーム(A)とアームAスプリングを下図のように合わせ、位置に注意してローディングベースにのせる。)

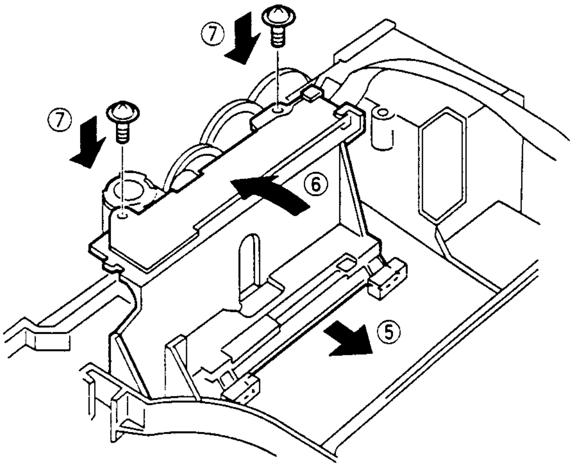

Arm A Spring
Arm (A)
Loading Base
Arm (A)

③ Set the drive plate and arm plate, which were assembled in Step ①, on the Arm (A) side as shown below.
At this time be careful to keep Arm (A) in the position described in Step ②.
(①でセットしたドライブプレートを下図のようにアーム(A)側からセットする、この時アーム(A)が②で合わせた位置からずれないように注意する。)

④ Insert the gear plate boss into the drive plate groove and pull it toward you.
(ギアプレートのボスをドライブプレートの溝に入れ手前に引く。)

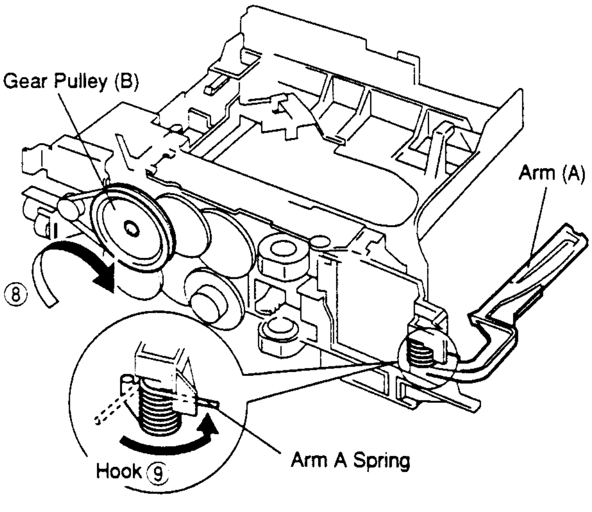

Drive Plate
Gear Plate Boss
④
Set
Arm Plate
③
Arm (A)

⑤-⑦

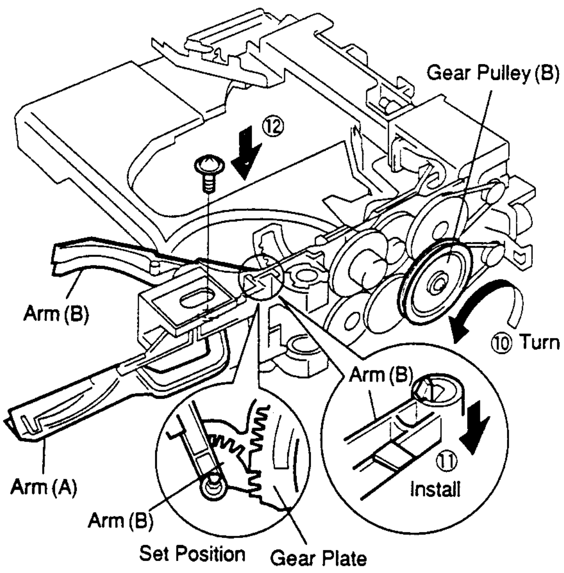


⑧ Turn gear pulley (B) and position Arm (A) as shown in below.
(ギアプーリー(B)を回してアーム(A)を下図の位置にする。)

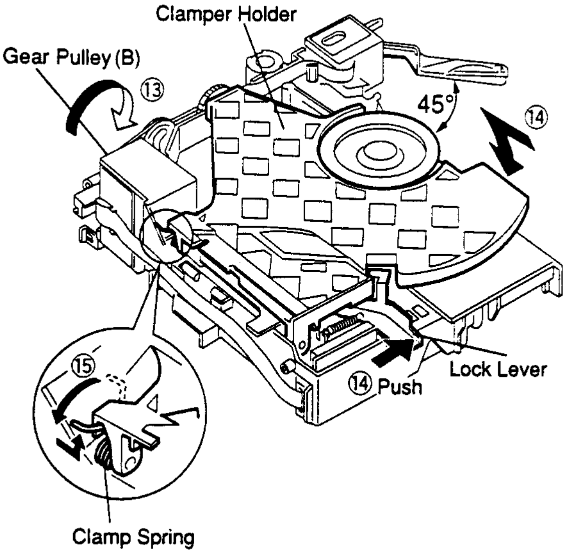
⑨


Gear Pulley (B)
Arm (A)
⑧
Hook ⑨
Arm A Spring

⑩ – ⑫

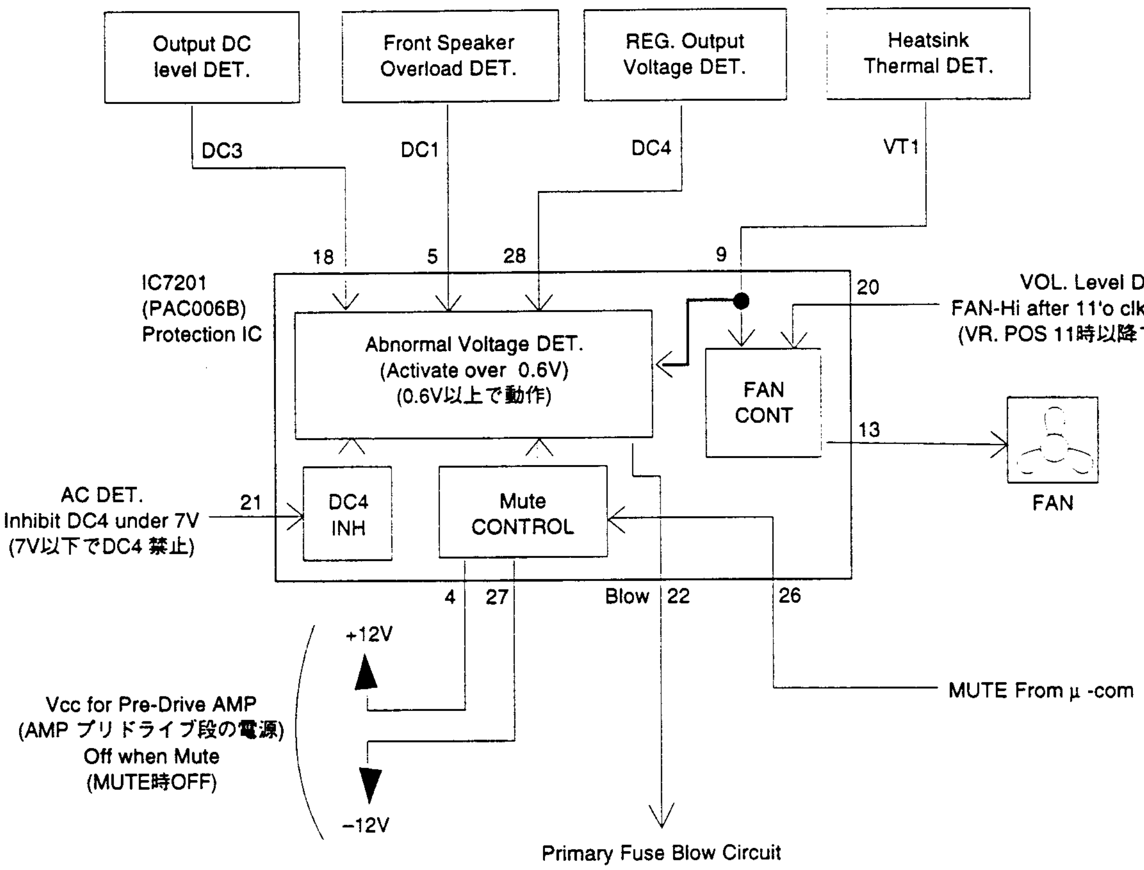

Gear Pulley (B)
⑫
Arm (B)
⑩ Turn
Arm (B)
⑪
Install
Arm (A)
Arm (B)
Set Position
Gear Plate

⑬ – ⑮


Clamper Holder
Gear Pulley (B)
⑬
45°
⑭
⑮
Lock Lever
⑭ Push
Clamp Spring

2. HOW TO DIAGONISE CIRCUIT WHEN PRIMARY FUSE BLOWS
(パワーアンプモジュール診査方法)

2.1 OUTLINE OF PROTECTION CIRCUIT
(保護回路の概要)


Output DC level DET.
Front Speaker Overload DET.
REG. Output Voltage DET.
Heatsink Thermal DET.
DC3
DC1
DC4
VT1
18
5
28
9
IC7201
(PAC006B)
Protection IC
Abnormal Voltage DET.
(Activate over 0.6V)
(0.6V以上で動作)
20
VOL. Level Det.
FAN-Hi after 11'o clk VR. POS
(VR. POS 11時以降でFAN-Hi)
FAN CONT
13
FAN
AC DET.
Inhibit DC4 under 7V
(7V以下でDC4 禁止)
21
DC4 INH
Mute CONTROL
4
27
Blow
22
26
+12V
-12V
Vcc for Pre-Drive AMP
(AMP プリドライブ段の電源)
Off when Mute
(MUTE時OFF)
MUTE From µ -com
Primary Fuse Blow Circuit

Outline of Operation

*DC1: When overload is detected at Front speaker terminal DC1 will become over ±0.6V and Protection IC will mute predrive amp circuit (±12V OFF).
(*DC2:Overload detection for rear speaker.)

*DC3: When DC voltage(over ±3DCV) is detected at output of Power amp, DC3 will become over±0.6V and will first mute predrive amp circuit for 2sec and then if does not resume normal condition Fuse blow circuit willbe activated.

*DC4: DC4 detect abnormal voltage at voltage regulator output. When becomes over ±0.6V, Fuse blow circuit will be activated.

*VT1: When temperature of the heatsink become over 105C°, VT1 will become under +7.5V and will first mute predrive amp circuit for 2sec and then if does not resume normal condition Fuse blow circuit will be activated.

(動作概要)

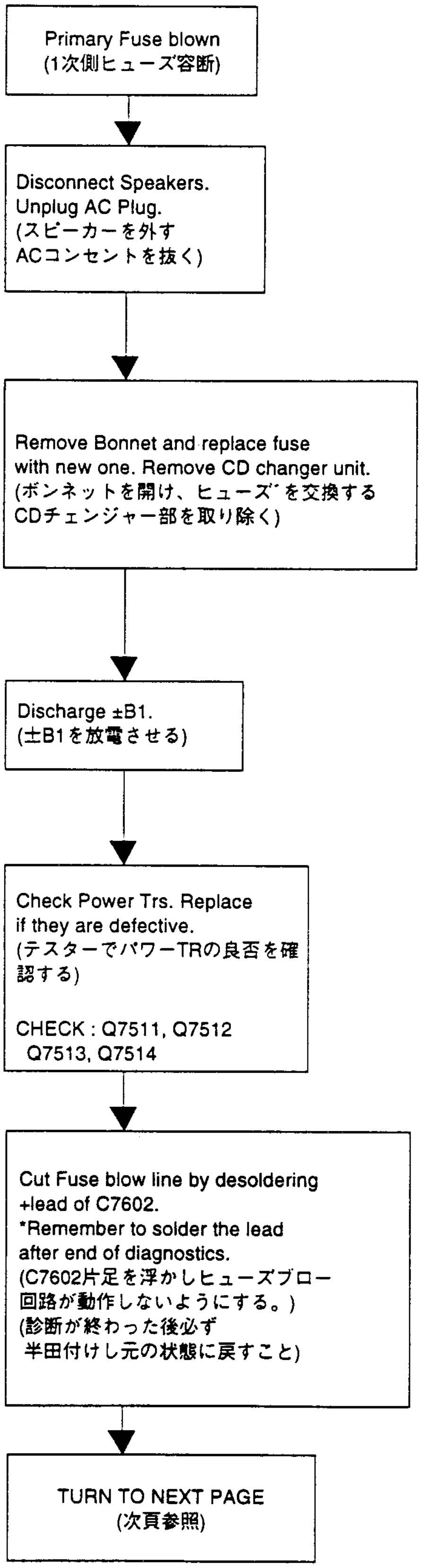
*DC1: DC1が±0.6V以上で フロントスピーカー端子のショートと判定、Muteをかける。(±12V OFFする)
(*DC2:リアスピーカーオーバーロード検出用端子)

*DC3: DC3が+0.6V以上でパワーアンプ出力異常と判定、MUTEを約2秒間かけ復帰しない場合は22ピンがHになりFUSE BLOW回路動作。

*DC4: DC4が+0.6V以上で電源レギュレーター部出力の異常と判定、22ピンがHになりFUSE BLOW回路動作。

*VT1: 放熱器温度 ~95℃:FAN-SPEED LOW, 95℃~ 104℃:FAN-SPEED HIGH,105℃(VT1=+7.5V)で MUTEを2秒間かけ復帰しない場合はFUSE BLOW回路動作 。

2.2 DIAGNOSTIC FLOW CHART
(診査フロー)



Primary Fuse blown
(1次側ヒューズ容断)

Disconnect Speakers.
Unplug AC Plug.
(スピーカーを外す
ACコンセントを抜く)

Remove Bonnet and replace fuse with new one. Remove CD changer unit.
(ボンネットを開け、ヒューズ゛を交換する
CDチェンジャー部を取り除く)

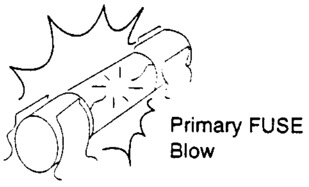
Discharge ±B1.
(±B1を放電させる)

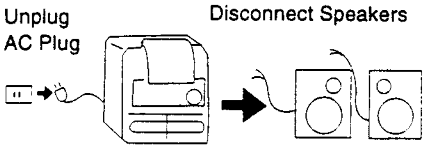
Check Power Trs. Replace if they are defective.
(テスターでパワーTRの良否を確認する)

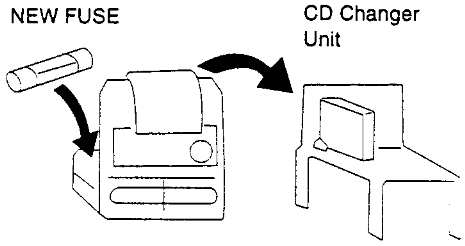
CHECK : Q7511, Q7512
Q7513, Q7514

Cut Fuse blow line by desoldering +lead of C7602.
*Remember to solder the lead after end of diagnostics.
(C7602片足を浮かしヒューズブロー
回路が動作しないようにする。)
(診断が終わった後必ず
半田付けし元の状態に戻すこと)

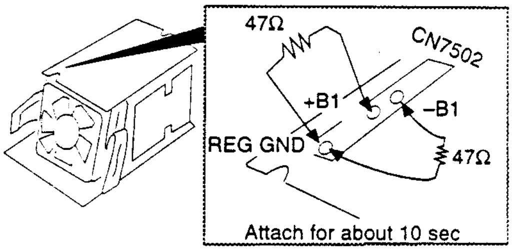
TURN TO NEXT PAGE
(次頁参照)

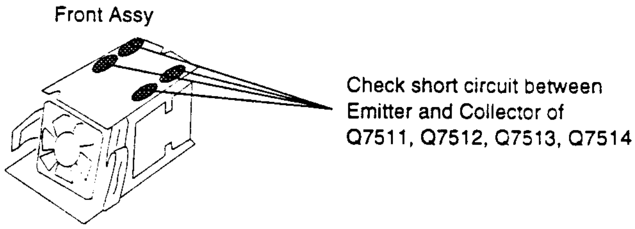

Primary FUSE
Blow

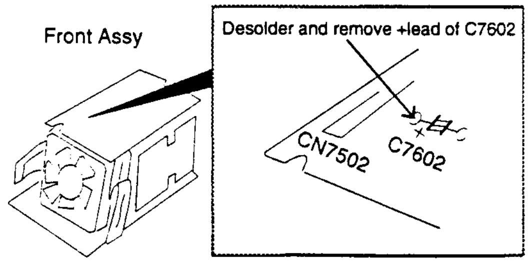

Unplug
AC Plug
Disconnect Speakers


NEW FUSE
CD Changer
Unit

Discharge ±B1
Remove Resistors after ±B1 are discharged
(放電後、抵抗を取り外す)


47Ω
CN7502
+B1
-B1
REG GND
47Ω
Attach for about 10 sec


Front Assy
Check short circuit between
Emitter and Collector of
Q7511, Q7512, Q7513, Q7514


Front Assy
Desolder and remove +lead of C7602
CN7502
C7602

AC PLUG IN
POWER ON
(AC プラグを差し込む
パワーオン)

Check voltage at IC7201 Pin22.
(IC7201 22Pブロー電圧確認)

Blow = 0V

No Trouble inside unit.
Could be external problems.
(異常なし
セット外部要因
の可能性あり)

Blow > +3V

Check output voltage of each protection circuit.
(各保護回路出力電圧確認)
(IC7201:DC1(pin5), DC2(pin12),
DC3 (pin18), DC4 (pin28), VT1 (pin9)

DC1, DC2 >+0.6V
DC1, DC2 < -0.6V

Speaker overload detected.
Check short circuit between speaker output and GND.
(スピーカー出力のオーバーロード検出
スピーカー出力ラインとGND間のショート確認)

VT1< 7. 5V

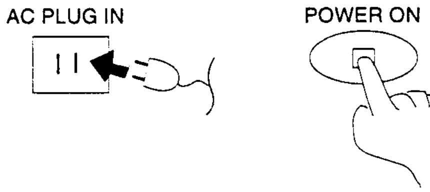
Over current detected at Heatsink thermal detection terminal.
(ヒートシンク温度検出端子のオーバーカレント検出)
CHECK: Q7301, Q7302, VR7201, FAN, IC7201

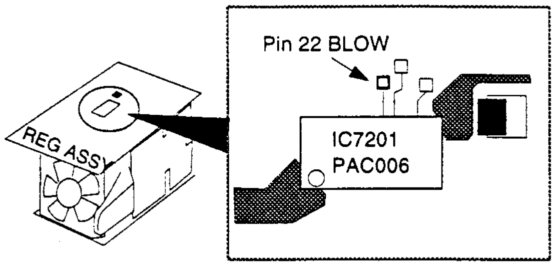
DC4>+0.6V
DC4<-0.6V

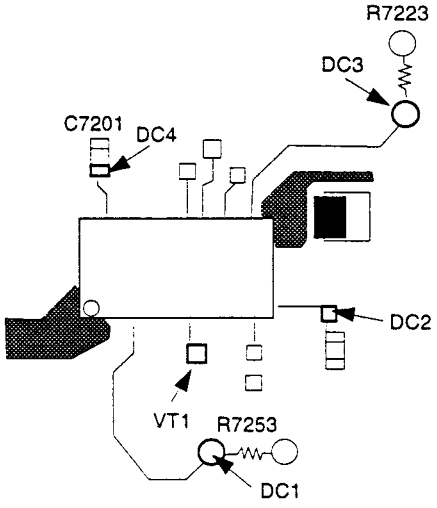
Abnormal voltage detected at output of regulators.
(レギュレター出力にて異常電圧検出)
CHECK: IC7401, IC7402, IC7403, IC7404
and Regulators in REG ASSY.

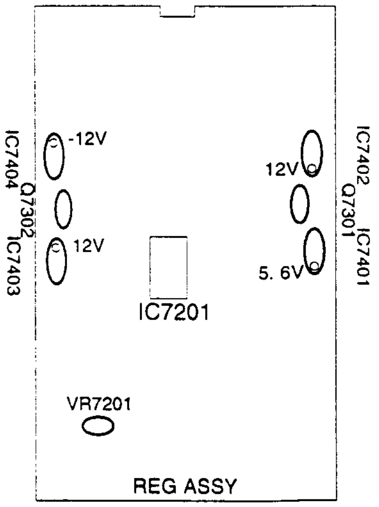
DC3>+0.6V
DC3<-0.6V

Turn to next page
(次頁参照)


AC PLUG IN
POWER ON


Pin 22 BLOW
IC7201
PAC006
REG ASSY

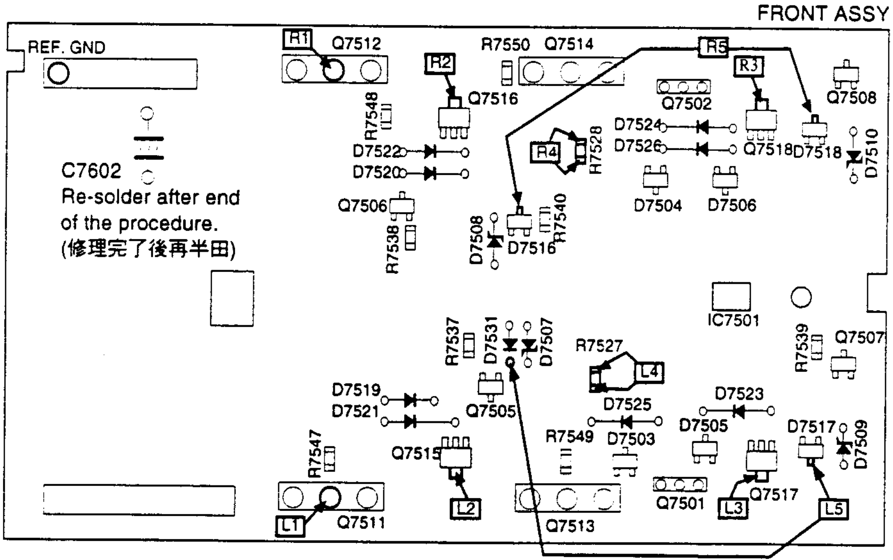

R7223
DC3
C7201
DC4
DC2
VT1
R7253
DC1


IC7404
Q7302
IC7403
-12V
12V
IC7402
Q7301
IC7401
12V
5. 6V
IC7201
VR7201
REG ASSY

POWER AMP check.
(パワーアンプ部チェック)

CHECK POINT e=emitter, b=base c=collecter	VOLTAGE	DEFECT PART
L ch		
L1(Q7511c-GND) (FAN-Hi)	+B1	D7519, D7521, R7547, Q7511
	- B1	D7523, D7525, R7549, Q7513
L2(Q7515c-GND)	+B1	R7537, Q7505, Q7515
	+B1-1V	D7519
	0V	R7547, D7519
L3(Q7517c-GND)	- B1	R7539, Q7507, Q7517
	- B1+1V	D7525
L4(R7527)	0V	R7549, D7525
L5(D7533-D7517)	0V	D7503, D7505, Q7501
	+13V, 3V	D7507, D7509
	0V	D7517, D7531
R ch		
R1(Q7512c-GND) (FAN-Hi)	+B1	D7520, D7522, R7548, Q7512
	- B1	D7524, D7526, R7550, Q7514
R2(Q7516c-GND)	+B1	R7538, Q7516, Q7506,
	+B1-1V	D7520
	0V	R7548, D7520
R3(Q7518c-GND)	- B1	R7540, Q7508, Q7518
	- B1+1V	D7526
	0V	R7550, D7526
R4(R7528)	0V	D7504, D7506, Q7502
R5(D7516-D7518)	+13V, 3V	D7508, D7510
	0V	D7516, D7518

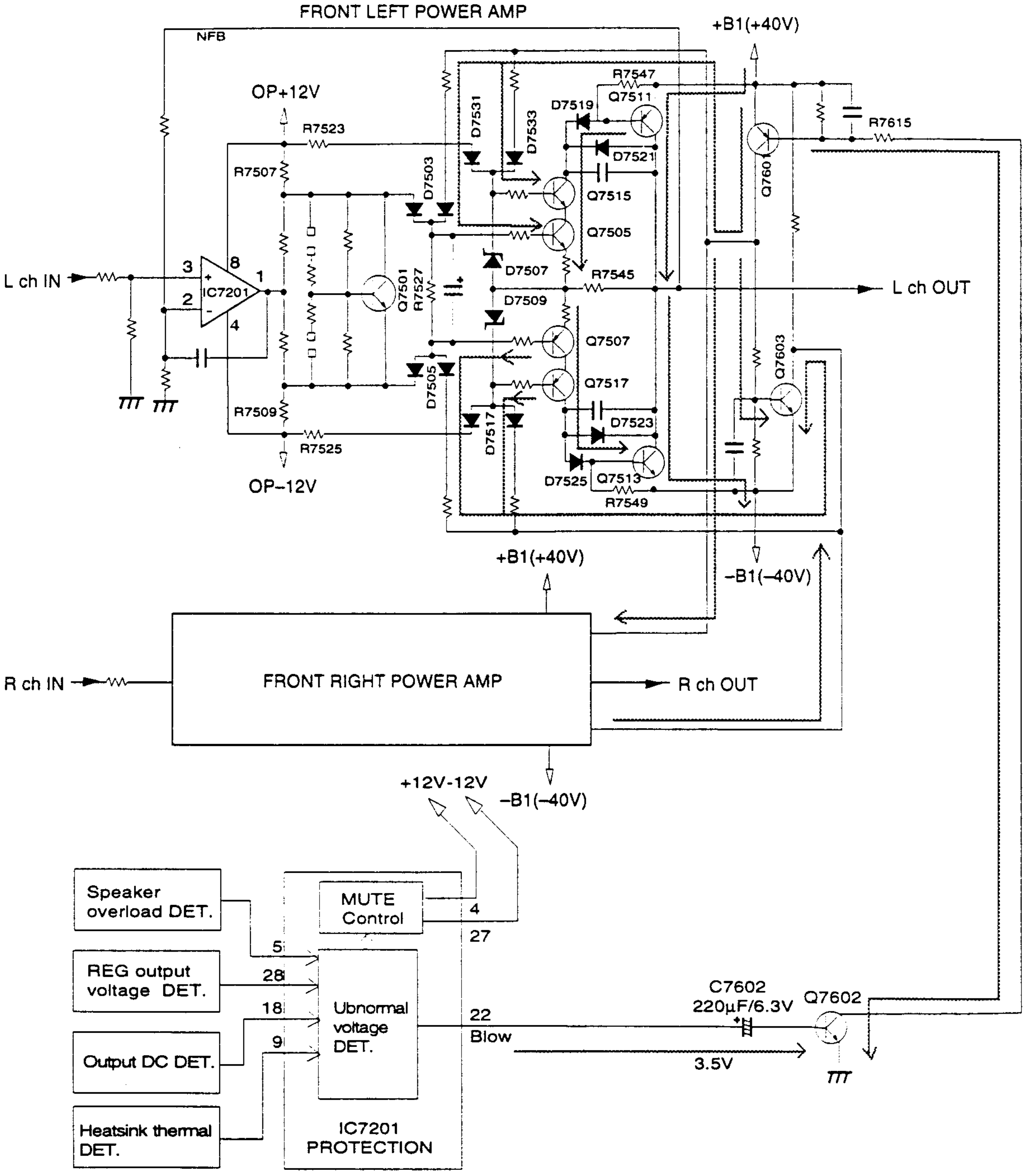
FRONT ASSY


REF. GND
R1
Q7512
R7550
Q7514
R5
R2
R3
Q7508
Q7516
Q7502
R7548
D7524
D7526
Q7518
D7518
D7510
D7522
D7520
R4
H7528
D7504
D7506
Q7506
R7540
R7538
D7508
D7516
C7602
Re-solder after end
of the procedure.
(修理完了後再半田)
IC7501
R7537
D7531
D7507
R7527
L4
R7539
Q7507
D7519
D7521
Q7505
D7523
D7525
D7505
D7517
D7509
R7549
D7503
R7547
Q7515
L2
Q7501
Q7517
L3
L5
L1
Q7511
Q7513

ATTENTION (注意)

Switch on the power after replacing defective parts and confirm blow voltage. If the voltage is 0V re-solder the +lead of C7602 and this is the end of the procedure.
Do not forget to re-solder the lead of C7602.
(部品交換後電源をONにして、ブロー電圧が0Vである事を確認する。 最後に、外したC7602のリード線を半田付けし作業を完了して下さい。 C7602は忘れずにに半田付けして下さい。
半田を外したまま修理を完了すると非常に危険ですので注意して下さい。)

2.3 BLOCK DIAGRAM (FUSE BLOW OPERATION)
(ブロック図) (ヒューズブロー動作時)

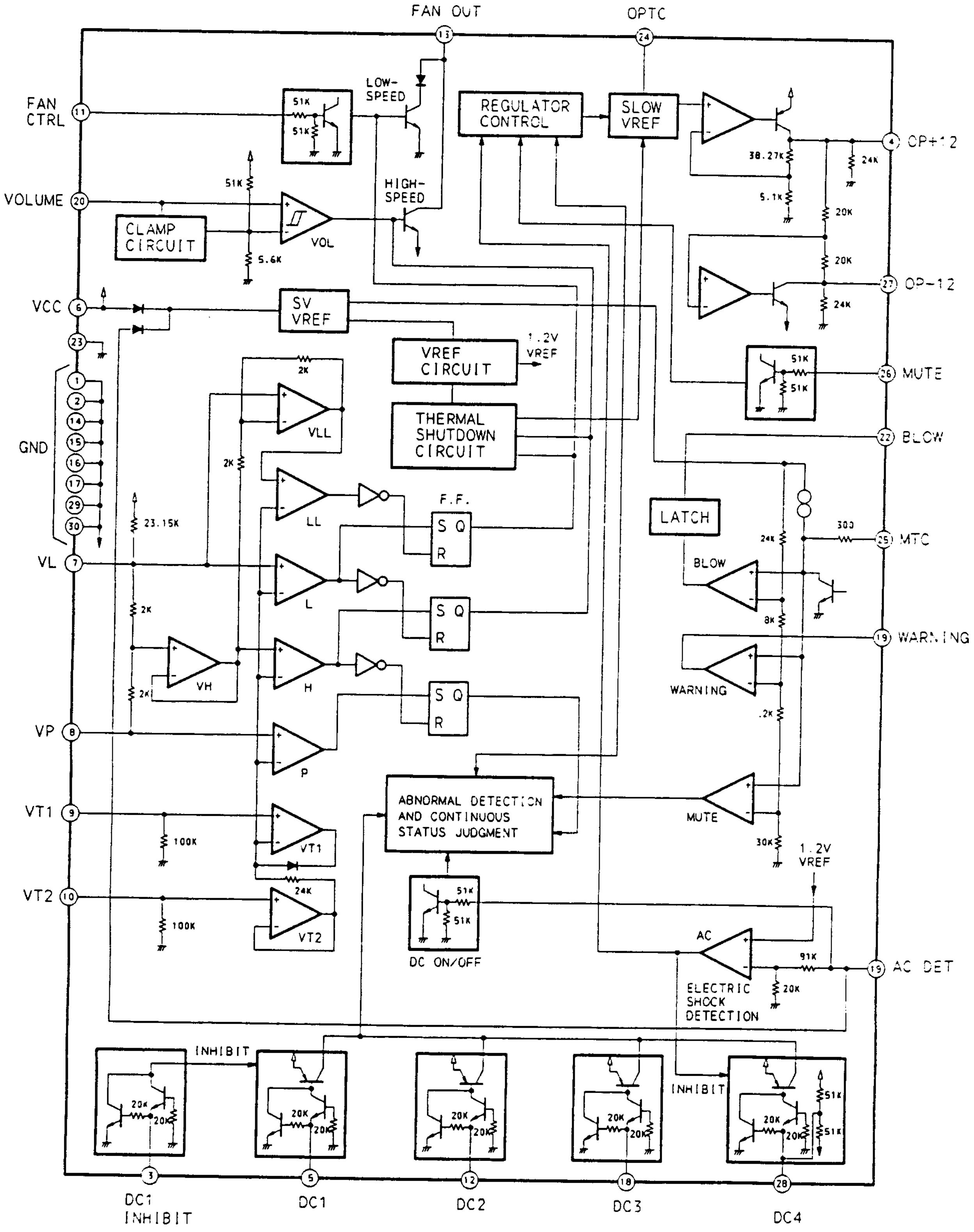

FRONT LEFT POWER AMP
NFB
+B1(+40V)
OP+12V
R7523
R7507
R7547
Q7511
D7519
D7521
D7531
D7533
D7503
R7615
Q7601
Q7515
Q7505
D7507
R7545
D7509
L ch IN
IC7201
3
8
1
2
4
Q7501
R7527
L ch OUT
Q7507
Q7517
Q7603
D7505
R7509
R7525
OP-12V
D7517
D7523
D7525
Q7513
R7549
+B1(+40V)
-B1(-40V)
R ch IN
FRONT RIGHT POWER AMP
R ch OUT
+12V-12V
-B1(-40V)
Speaker overload DET.
REG output voltage DET.
Output DC DET.
Heatsink thermal DET.
MUTE Control
4
27
5
28
18
9
Ubnormal voltage DET.
22
Blow
IC7201 PROTECTION
C7602
220µF/6.3V
Q7602
3.5V

This circuit will blow primary fuse by Turning on output transistors when protection circuit have been activated. By this action other parts may be dameged at the same time. Please check the parts, where current will flow when fuse blow circuit activates, that are shown in the diagram above.

（この回路では保護回路動作時、出力段TrをONすることにより１次側のヒューズを容断します．この際他のパーツが故障することもあります．ヒューズ容断時は上記の電流が流れる部品をあわせて確認下さい．）

2.4 IC BLOCK DIAGRAM
(IC ブロックダイアグラム)

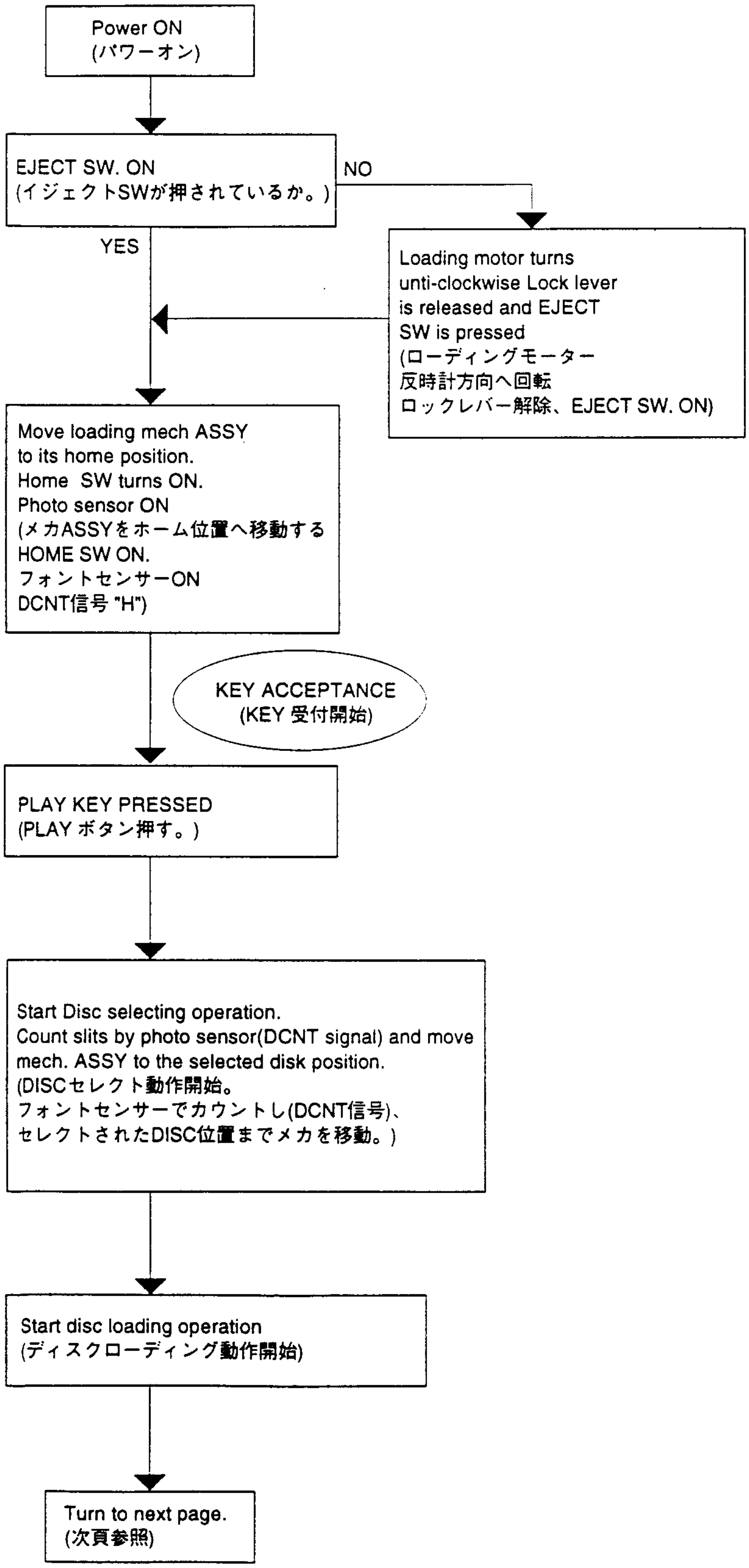
● PAC006B (IC7201)


FAN OUT
13
OPTC
24
FAN CTRL
11
51K
51K
LOW-SPEED
HIGH-SPEED
REGULATOR CONTROL
SLOW VREF
4
OP+12
38.27K
24K
5.1K
20K
20K
24K
VOLUME
20
51K
CLAMP CIRCUIT
VOL
5.6K
27
OP-12
VCC
6
SV VREF
23
1.2V VREF
VREF CIRCUIT
2K
THERMAL SHUTDOWN CIRCUIT
51K
51K
26
MUTE
22
BLOW
GND
1
2
14
15
16
17
29
30
VLL
2K
LL
F.F.
S Q
R
LATCH
300
25
MTC
24K
BLOW
VL
7
23.15K
L
S Q
R
8K
2K
19
WARNING
WARNING
VH
2K
H
S Q
R
1.2K
VP
8
P
ABNORMAL DETECTION AND CONTINUOUS STATUS JUDGMENT
MUTE
30K
1.2V VREF
VT1
9
100K
VT1
24K
VT2
10
100K
VT2
51K
51K
DC ON/OFF
AC
91K
19
AC DET
20K
ELECTRIC SHOCK DETECTION
INHIBIT
20K
20K
20K
20K
20K
20K
20K
20K
INHIBIT
20K
20K
51K
51K
3
DC1 INHIBIT
5
DC1
12
DC2
18
DC3
28
DC4

3. FLOW CHART (フローチャート)

3. 1 GM MECH. ASSY (GM メカASSY)

OPERATIONAL FLOW CHART(動作フロー)



Power ON
(パワーオン)

EJECT SW. ON
(イジェクトSWが押されているか。)

Loading motor turns unti-clockwise Lock lever is released and EJECT SW is pressed
(ローディングモーター
反時計方向へ回転
ロックレバー解除、EJECT SW. ON)

Move loading mech ASSY to its home position.
Home SW turns ON.
Photo sensor ON
(メカASSYをホーム位置へ移動する
HOME SW ON.
フォントセンサーON
DCNT信号 "H")

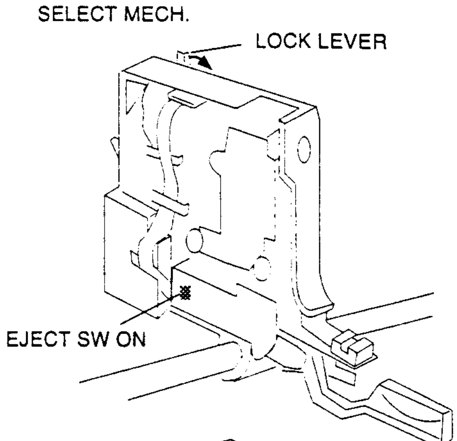
KEY ACCEPTANCE
(KEY 受付開始)

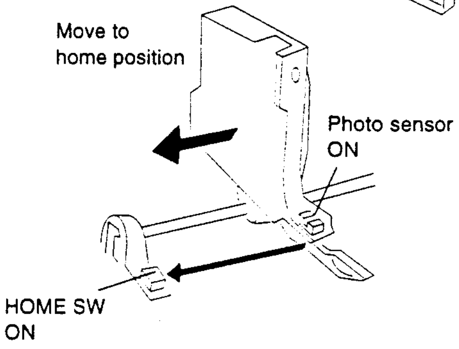
PLAY KEY PRESSED
(PLAY ボタン押す。)

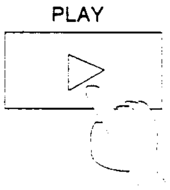
Start Disc selecting operation.
Count slits by photo sensor(DCNT signal) and move mech. ASSY to the selected disk position.
(DISCセレクト動作開始。
フォントセンサーでカウントし(DCNT信号)、
セレクトされたDISC位置までメカを移動。)

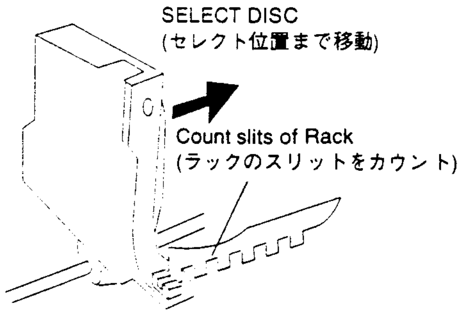
Start disc loading operation
(ディスクローディング動作開始)

Turn to next page.
(次頁参照)

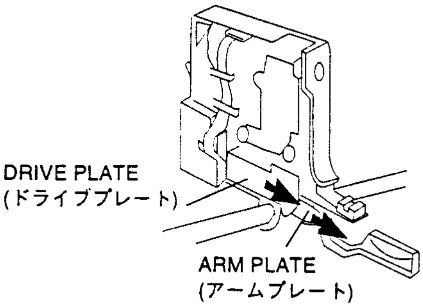

SELECT MECH.
LOCK LEVER
※
EJECT SW ON


Move to home position
Photo sensor ON
HOME SW ON

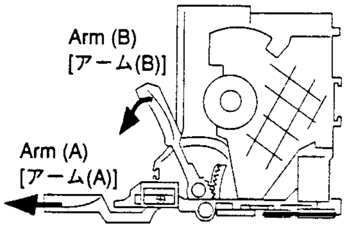



SELECT DISC
(セレクト位置まで移動)
Count slits of Rack
(ラックのスリットをカウント)

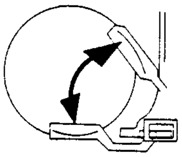
Start disc loading operation
Loading motor starts turning clockwise.
(ディスクローディング動作開始、
ローディングモーター時計方向へ
回転開始。)



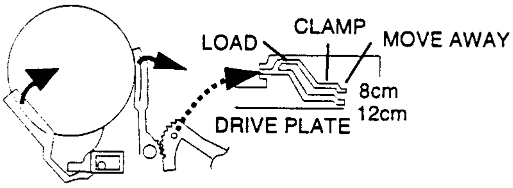
Drive plate & Arm plate start moving forwards.
(ドライブプレート、アームプレート前方へ
移動開始)



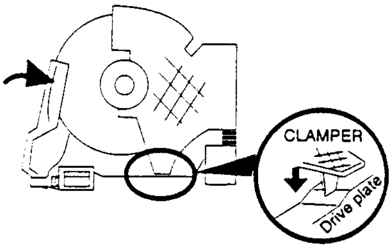
Arm (B) moves to the direction of the arrow
Arm (A), which is connected to Arm plate moves forwards.
(ドライブプレート上の溝に沿ってアーム(B)が矢印の方向
へ移動アームプレートに連結されたアーム(A)が前方へ移動)



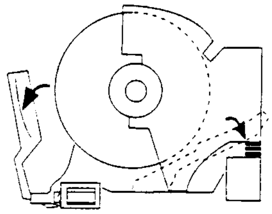
When Arm (B) catches the disc the distance between Arm (A) and Arm (B) is fixed.
The disc is catched by two arms
(アーム(B)が ディスクに当ると、ディスクの径に応じて
アーム (B)の位置決めがなされる。
ここでディスクがホールドされる)



Arm plate & Drive plate moves further on.
The Arm (A) and Arm (B) starts moving upwards holding the disc between each other
(アームプレート、ドライブプレートが更に前方へ移動
するとアーム (A)の回転軸がローディングベースの一つ目
の窪みに入りアーム (A)が上に上がり始める。
同時にアーム(B)はドライブプレートの溝によって上に
戻り始める。)

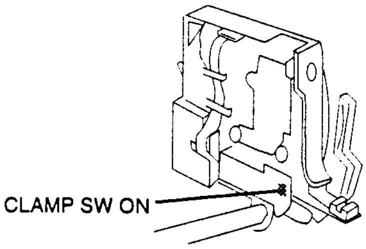


Disc is loaded in the mechanism and Arm plate stops.
Drive plate moves further on and Clamper slides down the slope on the Drive plate and clamps the disc.
(アーム (A)が上がり切ったところでアームプレートが停止、
ドライブプレートは更に前方へ進む。
ドライブプレートの傾斜に沿ってクランパーが下がり
ディスクがクランプされる。)



Drive plate moves further on and pushes the Arm (A) to move Arm (A) away from the disc. Also Arm (B) moves away from the disc due to the slit on the Drive plate.
(更にドライブプレートが移動し、アーム(A)を押しアーム (A)の回転軸が
ローディングベースの2つめの溝に押し込まれアーム(A)がディスクから
離れる方向に動く、またアーム(B)もドライブプレートの溝によりディス
クから離れる方向へ移動する。)

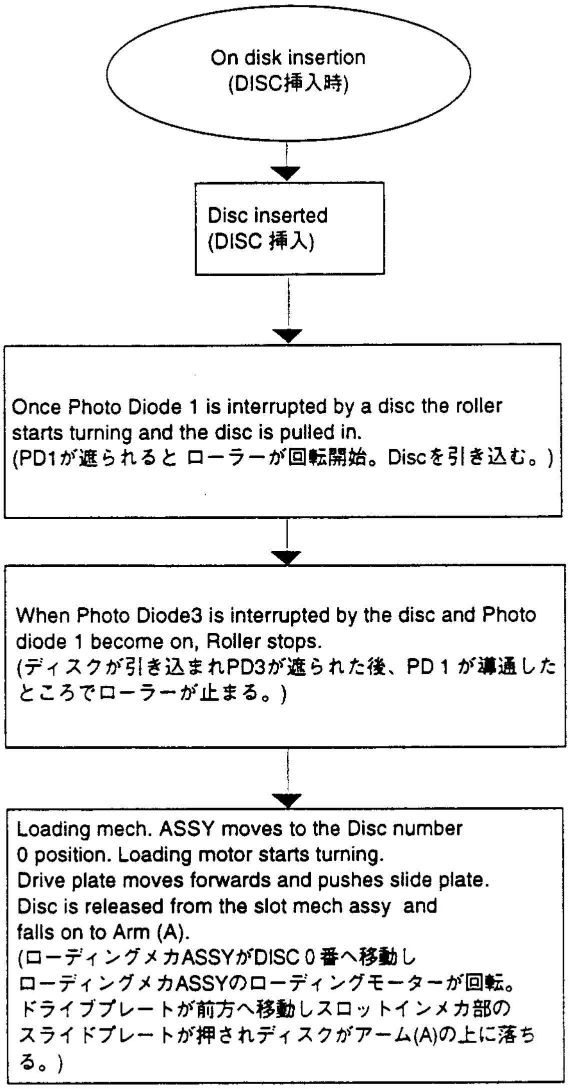
Drive plate moves and turns on CLAMP SW.
(ドライブプレートがCLAMP SWをONする。)



Loading motor stops and Servo operation starts.
(ローディングモーター回転 STOP
サーボ動作開始。)

3.2 CD SLOT-IN MECH. (SLOT-IN 部)

OPERATIONAL FLOW CHART (動作フロー)



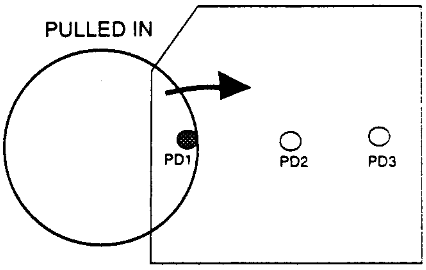
On disk insertion
(DISC挿入時)

Disc inserted
(DISC 挿入)

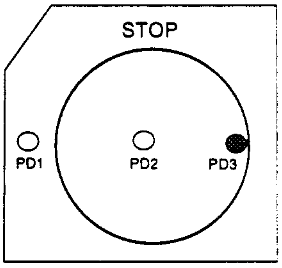
Once Photo Diode 1 is interrupted by a disc the roller starts turning and the disc is pulled in.
(PD1が遮られると ローラーが回転開始。Discを引き込む。)

When Photo Diode3 is interrupted by the disc and Photo diode 1 become on, Roller stops.
(ディスクが引き込まれPD3が遮られた後、PD 1 が導通したところでローラーが止まる。)

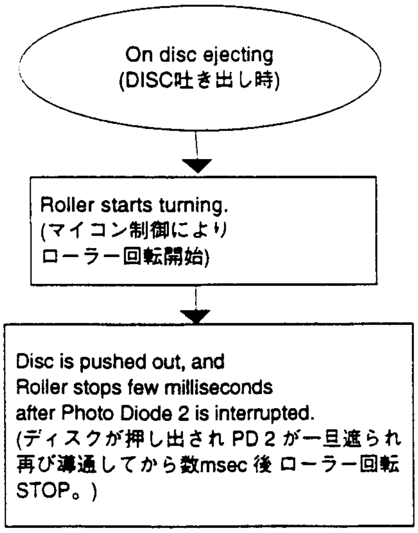
Loading mech. ASSY moves to the Disc number 0 position. Loading motor starts turning.
Drive plate moves forwards and pushes slide plate.
Disc is released from the slot mech assy and falls on to Arm (A).
(ローディングメカASSYがDISC 0 番へ移動し
ローディングメカASSYのローディングモーターが回転。
ドライブプレートが前方へ移動しスロットインメカ部の
スライドプレートが押されディスクがアーム(A)の上に落ちる。)



SLOT–IN MECH.



SLOT–IN MECH.



On disc ejecting
(DISC吐き出し時)

Roller starts turning.
(マイコン制御により
ローラー回転開始)

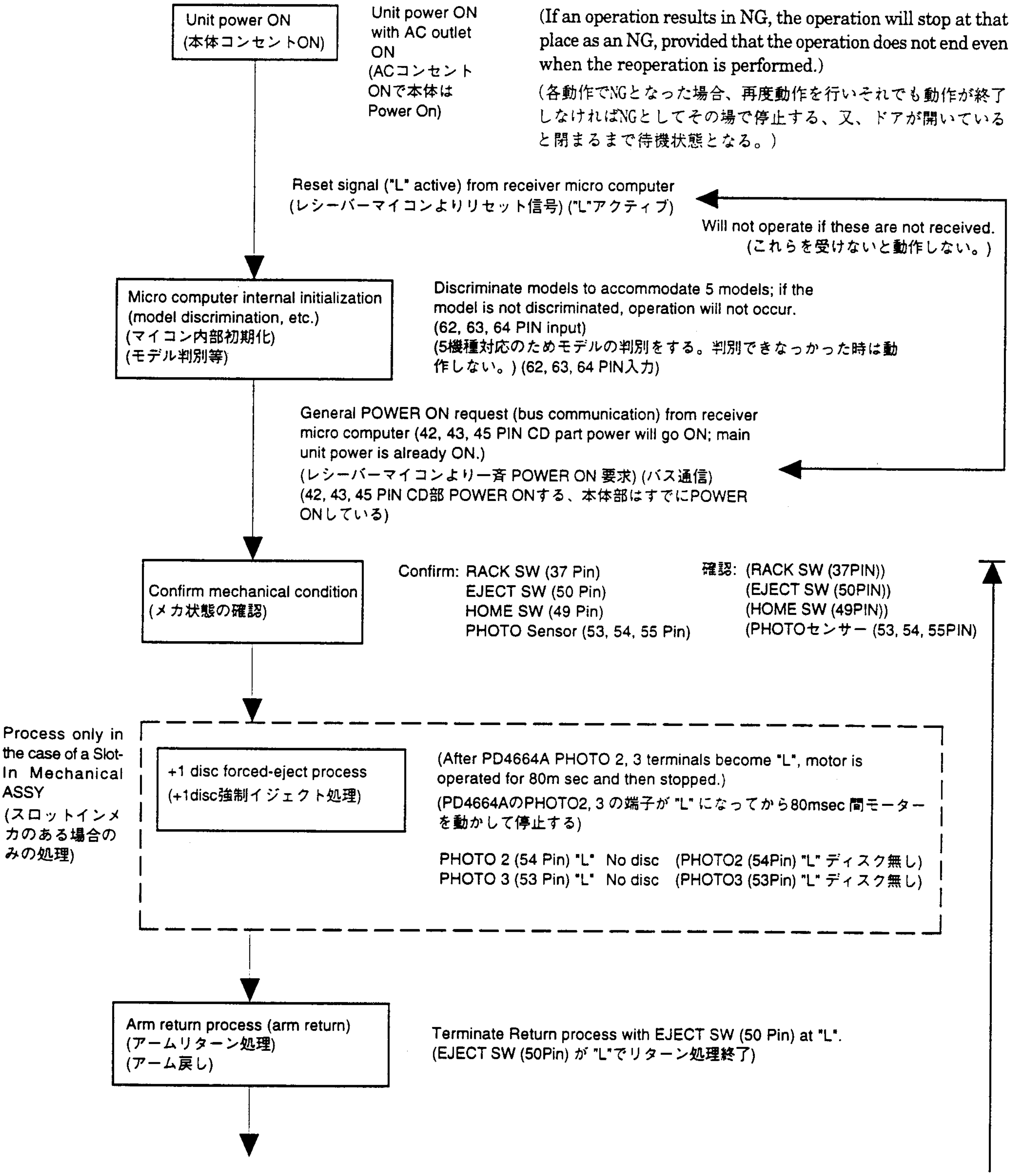
Disc is pushed out, and
Roller stops few milliseconds
after Photo Diode 2 is interrupted.
(ディスクが押し出され PD 2 が一旦遮られ
再び導通してから数msec 後 ローラー回転
STOP。)

3.3 GM MECH. CD MICRO-COMPUTER (GMメカ CDマイコン)

EX. PD4644A (IC8001: CD ASSY) for XR-P760F

OPERATIONAL FLOW CHART (動作フロー)

- Sequence when AC outlet is ON (ACコンセントON時のシーケンス)


Unit power ON
(本体コンセントON)
Micro computer internal initialization (model discrimination, etc.)
(マイコン内部初期化)
(モデル判別等)
Confirm mechanical condition
(メカ状態の確認)
+1 disc forced-eject process
(+1disc強制イジェクト処理)
Arm return process (arm return)
(アームリターン処理)
(アーム戻し)

Unit power ON with AC outlet ON
(ACコンセントONで本体はPower On)

(If an operation results in NG, the operation will stop at that place as an NG, provided that the operation does not end even when the reoperation is performed.)
(各動作でNGとなった場合、再度動作を行いそれでも動作が終了しなければNGとしてその場で停止する、又、ドアが開いていると閉まるまで待機状態となる。)

Reset signal ("L" active) from receiver micro computer
(レシーバーマイコンよりリセット信号) ("L"アクティブ)

Will not operate if these are not received.
(これらを受けないと動作しない。)

Discriminate models to accommodate 5 models; if the model is not discriminated, operation will not occur. (62, 63, 64 PIN input)
(5機種対応のためモデルの判別をする。判別できなかった時は動作しない。) (62, 63, 64 PIN入力)

General POWER ON request (bus communication) from receiver micro computer (42, 43, 45 PIN CD part power will go ON; main unit power is already ON.)
(レシーバーマイコンより一斉 POWER ON 要求) (バス通信)
(42, 43, 45 PIN CD部 POWER ONする、本体部はすでにPOWER ONしている)

Confirm: RACK SW (37 Pin)
EJECT SW (50 Pin)
HOME SW (49 Pin)
PHOTO Sensor (53, 54, 55 Pin)

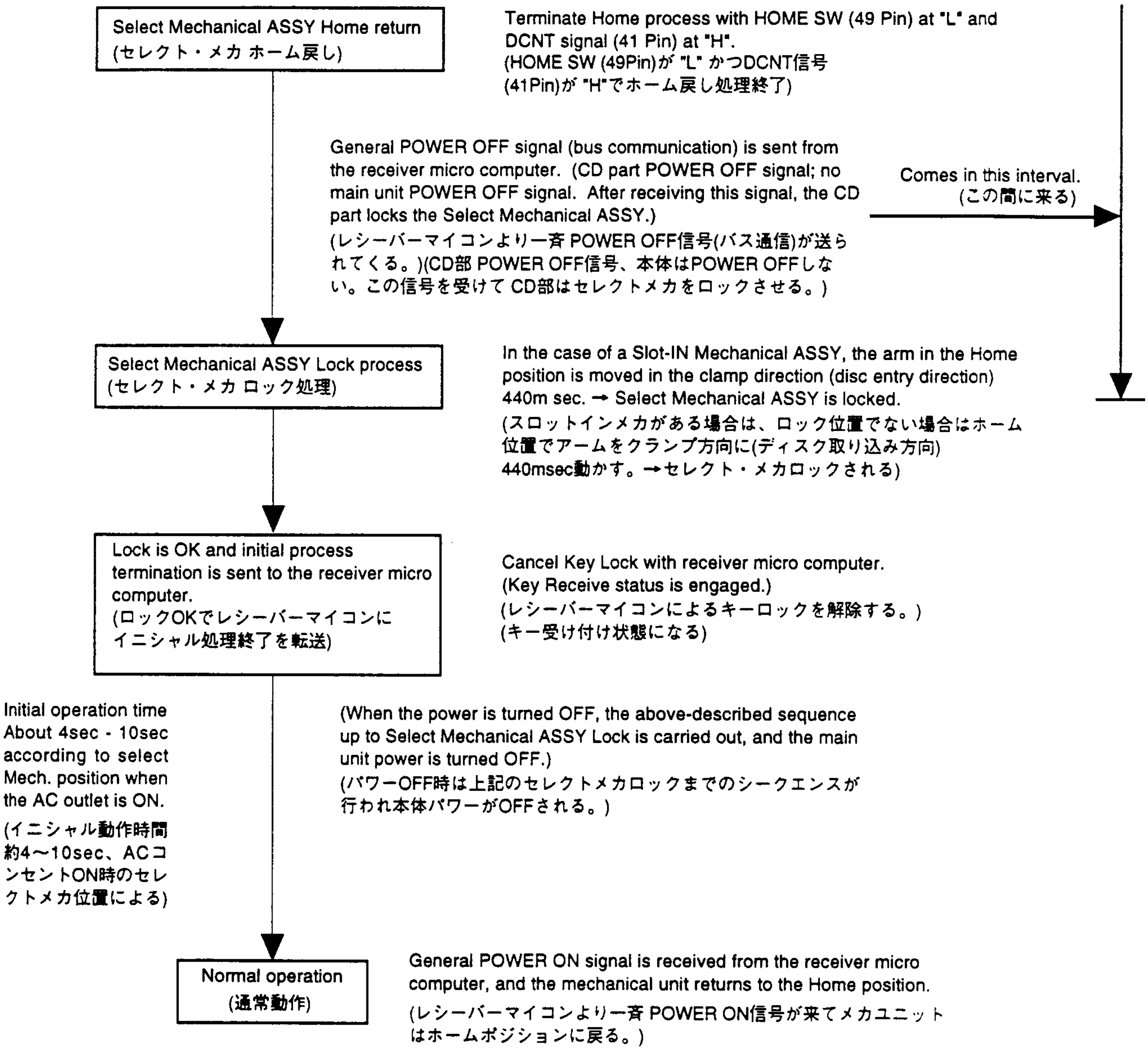
確認: (RACK SW (37PIN))
(EJECT SW (50PIN))
(HOME SW (49PIN))
(PHOTOセンサー (53, 54, 55PIN)

Process only in the case of a Slot-In Mechanical ASSY
(スロットインメカのある場合のみの処理)

(After PD4664A PHOTO 2, 3 terminals become "L", motor is operated for 80m sec and then stopped.)
(PD4664AのPHOTO2, 3 の端子が "L" になってから80msec 間モーターを動かして停止する)

PHOTO 2 (54 Pin) "L" No disc (PHOTO2 (54Pin) "L" ディスク無し)
PHOTO 3 (53 Pin) "L" No disc (PHOTO3 (53Pin) "L" ディスク無し)

Terminate Return process with EJECT SW (50 Pin) at "L".
(EJECT SW (50Pin) が "L"でリターン処理終了)



Select Mechanical ASSY Home return
(セレクト・メカ ホーム戻し)

Terminate Home process with HOME SW (49 Pin) at "L" and DCNT signal (41 Pin) at "H".
(HOME SW (49Pin)が "L" かつDCNT信号
(41Pin)が "H"でホーム戻し処理終了)

General POWER OFF signal (bus communication) is sent from the receiver micro computer. (CD part POWER OFF signal; no main unit POWER OFF signal. After receiving this signal, the CD part locks the Select Mechanical ASSY.)
(レシーバーマイコンより一斉 POWER OFF信号(バス通信)が送られてくる。)(CD部 POWER OFF信号、本体はPOWER OFFしない。この信号を受けて CD部はセレクトメカをロックさせる。)

Comes in this interval.
(この間に来る)

Select Mechanical ASSY Lock process
(セレクト・メカ ロック処理)

In the case of a Slot-IN Mechanical ASSY, the arm in the Home position is moved in the clamp direction (disc entry direction) 440m sec. → Select Mechanical ASSY is locked.
(スロットインメカがある場合は、ロック位置でない場合はホーム位置でアームをクランプ方向に(ディスク取り込み方向) 440msec動かす。→セレクト・メカロックされる)

Lock is OK and initial process termination is sent to the receiver micro computer.
(ロックOKでレシーバーマイコンに
イニシャル処理終了を転送)

Cancel Key Lock with receiver micro computer.
(Key Receive status is engaged.)
(レシーバーマイコンによるキーロックを解除する。)
(キー受け付け状態になる)

Initial operation time About 4sec - 10sec according to select Mech. position when the AC outlet is ON.
(イニシャル動作時間約4～10sec、ACコンセントON時のセレクトメカ位置による)

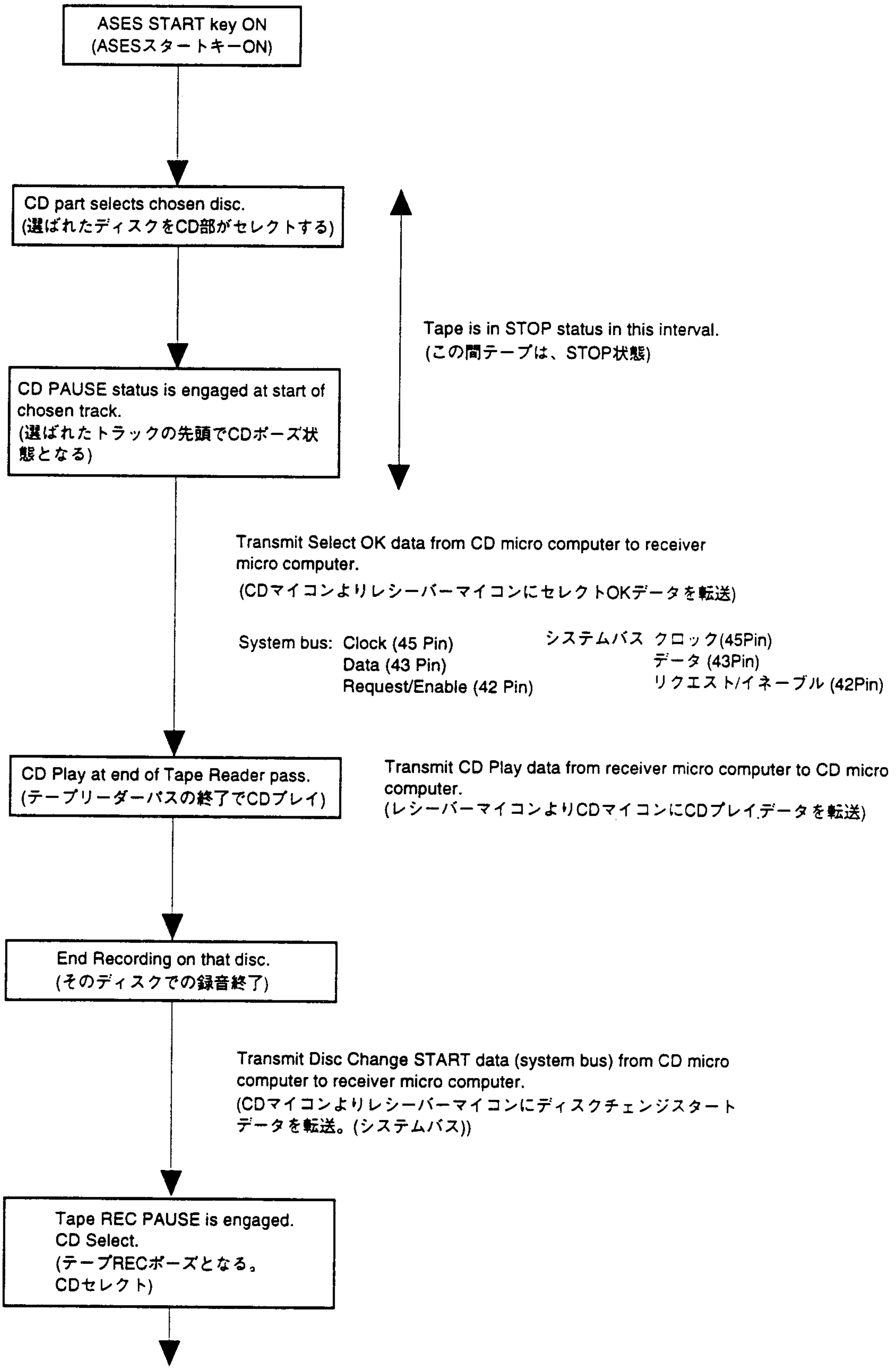
(When the power is turned OFF, the above-described sequence up to Select Mechanical ASSY Lock is carried out, and the main unit power is turned OFF.)
(パワーOFF時は上記のセレクトメカロックまでのシークエンスが行われ本体パワーがOFFされる。)

Normal operation
(通常動作)

General POWER ON signal is received from the receiver micro computer, and the mechanical unit returns to the Home position.
(レシーバーマイコンより一斉 POWER ON信号が来てメカユニットはホームポジションに戻る。)

- Sequence during Program ASES (Program is incorporated and sequence starts from CD STOP status)

(● プログラムASESの時のシーケンス) (プログラムが組まれていてCD ストップ状態からのシーケンス)



ASES START key ON
(ASESスタートキーON)

CD part selects chosen disc.
(選ばれたディスクをCD部がセレクトする)

Tape is in STOP status in this interval.
(この間テープは、STOP状態)

CD PAUSE status is engaged at start of chosen track.
(選ばれたトラックの先頭でCDポーズ状態となる)

Transmit Select OK data from CD micro computer to receiver micro computer.
(CDマイコンよりレシーバーマイコンにセレクトOKデータを転送)

System bus: Clock (45 Pin)
Data (43 Pin)
Request/Enable (42 Pin)

システムバス クロック(45Pin)
データ (43Pin)
リクエスト/イネーブル (42Pin)

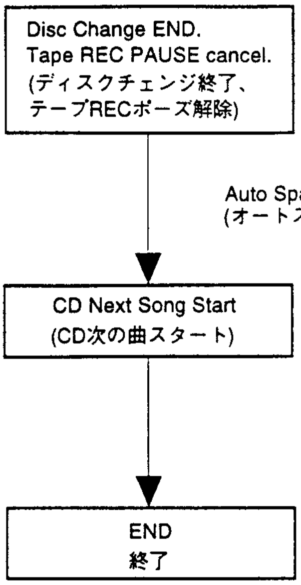
CD Play at end of Tape Reader pass.
(テープリーダーパスの終了でCDプレイ)

Transmit CD Play data from receiver micro computer to CD micro computer.
(レシーバーマイコンよりCDマイコンにCDプレイデータを転送)

End Recording on that disc.
(そのディスクでの録音終了)

Transmit Disc Change START data (system bus) from CD micro computer to receiver micro computer.
(CDマイコンよりレシーバーマイコンにディスクチェンジスタートデータを転送。(システムバス))

Tape REC PAUSE is engaged.
CD Select.
(テープRECポーズとなる。
CDセレクト)


Disc Change END.
Tape REC PAUSE cancel.
(ディスクチェンジ終了、
テープRECポーズ解除)
CD Next Song Start
(CD次の曲スタート)
END
終了

Transmit Disc Change END data from CD micro computer to receiver micro computer.
(CDマイコンよりレシーバーマイコンにディスクチェンジ終了データを転送)

Auto Space 6 sec.
(オートスペース 6秒)

(Minimum time between songs on tape
During disc changeover: 6 sec.
Within songs on same disc: 5 sec.)

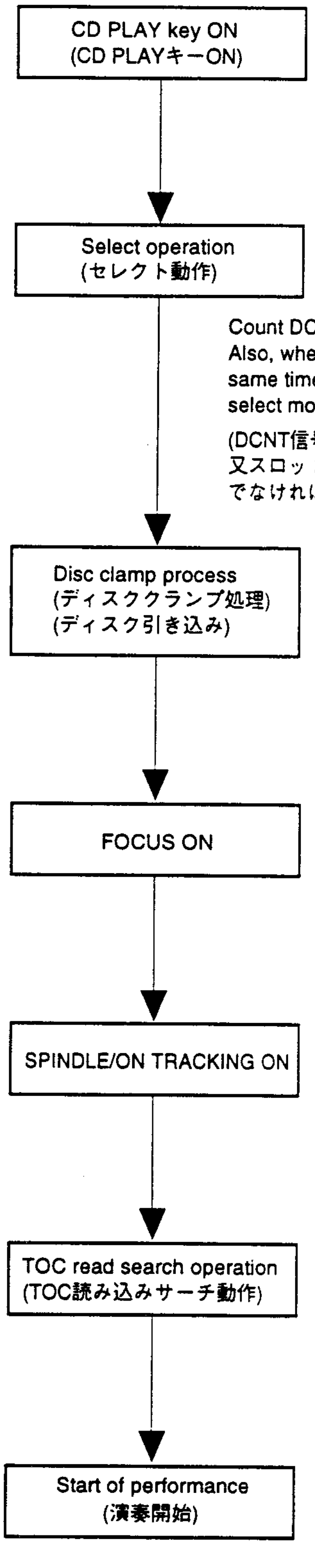
(テープ曲間最短時間
DISC 交換時:6sec
同DISC内曲時:5sec)

Engage ASES END at end of recording of all songs, and stop both Tape and CD. Program remains as it is.
(全曲録音終了でASES END、テープ、CDとも ストップする。プログラムはそのまま残る。)

Reference DISC changeover time
From DISC STOP of 1st disc to DISC PLAY of 2nd disc: about 6 sec.
From DISC STOP of 1st disc to DISC PLAY of 25th disc: about 10 sec.

(参考 DISC交換時間
1枚目DISC STOPから2枚目DISC PLAYまで:約6sec
1枚目DISC STOPから25枚目DISC PLAYまで:約10sec)

• Sequence during PLAY operation (from Mechanical ASSY Home standby at CD function)
(• PLAY操作時のシーケンス) (ファンクションCDでメカ・ホーム待機中から)


CD PLAY key ON
(CD PLAYキーON)
Select operation
(セレクト動作)
Disc clamp process
(ディスククランプ処理)
(ディスク引き込み)
FOCUS ON
SPINDLE/ON TRACKING ON
TOC read search operation
(TOC読み込みサーチ動作)
Start of performance
(演奏開始)

Count DCNT signals (41 Pin) and search for object disc. Also, when selecting Slot +1 disc, look at the HOME SW at the same time, and if it is not at "L", re-select. (If +1 is available, select model only.)

(DCNT信号 (41PIN)をカウントして目的のディスクを捜す。
又スロット+1DISCをセレクトする時はHOME SWも同時に見て"L"
でなければ再セレクトする。(+1モデルのみ))

Terminate Clamp process with CLMP SW (51 Pin) at "L". But when the DCNT signal is at "L" during the Clamp process, redo process from Select operation (one time only).
(CLMP SW (51Pin)が "L" で引き込み処理終了。
但し、引き込み処理中にDCNT信号が"L"になった場合はセレクト動作からやり直す。)(1回だけ)

FOCUS OK with FCOK (27 Pin) at "H".
(FCOK (27Pin) "H"でFOCUS OK)

SPINDLE, TRACKING OK with GFS (26 Pin) at "H".
(GFS (26Pin) "H"でSPINDLE, TRACKING OK)

3.4 IC INFORMATION (IC情報)

Pin No.	Symbol	Name	I/O	Description	Remarks
1	P94/FIP6	G6	O	FL drive DIGIT output (FL 駆動用DIGIT出力)	Outputs "L"
2	P93/FIP5	G5	O		
3	P92/FIP4	GRID G4	O		
4	P91/FIP3	G3	O		
5	P90/FIP2	G2	O		
6	P81/FIP1	G1	O		
7	P80/FIP0	G0	O		
8	Vdd	+5V	—		
9	P27	DISP CLK	O	Clock output for display data transmission (表示データー送信用クロック)	
10	P26	DISP DATA	O	Data output for display	
11	P25	MUTE	O	Muting control output	"H" MUTE
12	P24	¯XRST	O	Reset for LSI	"¯|_|¯": Reset
13	P23	¯XLAT	O	LSI control data latch pulse	"¯|_|¯": Latch
14	SCK1	CD CLK	O	LSI serial clock output	Serial clock for LSI
15	SO1	CD DATA	O	LSI control data serial output	LSI control data
16	SI1	SQSO	I	Subcode Q-data serial input	Subcode data input
17	RESET	¯RST	I	CPU reset	CPU reset "¯|_|¯"
18	P74	¯LD ON	O	Laser diode control output	"L": ON ; "H": OFF
19	P73	¯XTAL ON/OFF	O	LSI oscillation control output	"L": oscillation ; "H": Stop
20	AVss	GND	—		
21	P17	CD-G CE	O	CD-G control latch pulse	Outputs "L" with models that have no CD-G (CD-Gのないモデルでは"L"を出力する)
22	P16	CD-G MUTE	O	CD-G muting output	
23	P15	(CD-G RST)	O	Unused	
24	P14	(CD-GNTSC)	O	Unused	
25	P13	SENS	I	LSI operating status multi-mode input (LSI動作状態多モード入力)	
26	P12	GFS	I	Frame synchronizing Lock input (フレームシンクロック入力)	"H" GFS OK
27	P11	FCOK	I	Focus OK input	"H" FOCUS OK
28	P10	POWER ON	O	NC	LSI power ON/OFF (Unused)
29	AVdd	+5V	—		
30	AVref	GND	—		

Pin No.	Symbol	Name	I/O	Description	Remarks
31	P04	INSD	I	Slider INSIDE SW input	"L" INSD SW ON
32	XT2	Open	—		
33	Vss	GND	—		
34	X1	Main system	—		
35	X2	Clock (4.19M)	—		
36	P37	TEST	I		"H" TEST
37	P36	-DOOR CLOSE	I	RACK SW input	"L" Close completed
38	P35	-DOOR OPEN	I	Pull Up except for motorized door (電動ドア以外はプルアップ)	"L" Open completed (Unused)
39	P34	DSLT	O	Select motor output	Select motor Output
40	P33	DSRT	O		
41	P32	DCNT	I	Disc count pulse input	Disc count pulse
42	P31	SB REQ/ENA	I/O	System bus communication Request/Enable	System bus Request or Enable
43	P30	SB DATA	I/O	System bus communication data input/output	System bus data IN/OUT
44	INTP3	SCOR	I	Subcode synchronizing input	↓ : Subcode synch
45	INTP2	SB CLK	I	System bus communication clock input	↑ , ↓ : System bus clock
46	INTP1	STBYRELE	I	CPU Stop mode cancel pulse	↓ : Micro computer Standby mode cancel input
47	INTP0	RMDT	I	Remote control data input	↓ :Remote control data
48	IC(VPP)	GND	—		
49	P72	-HOME	I	Disc select HOME SW input	"L": Mechanical HOME position
50	P71	-EJECT	I	Loading out SW input	"L": Eject completed
51	P70	-CLMP	I	Clamp completion SW input	"L": Clamping completed
52	Vdd	+5V	—		
53	P127	P1S3	I	Slot part photo sensor input (Pull Up with models where Slot Mechanical ASSY+1 is not loaded) (+1のない機種はプルアップ)	+1 part photo sensor input
54	P126	P1S2	I		
55	P125	P1S1	I		
56	P124	IN1	O	Output for +1 Eject /Load (Output "L" for models where Slot Mechanical ASSY +1 is not loaded. Set to NC) (+1のない機種は出力 "L" です。NC)	Output for +1 Eject / Load
57	P123	OUT1	O		
58	P122	L IN	O	Loading mechanical output	Loading mechanical output
59	P121	L OUT	O		
60	P120	DOOR IN	O	Output "L" for models without motorized door. Set to NC (電動ドアでない機種は出力 "L" です。NC)	Motorized door output (Unused)
61	P117	DOOR OUT	O		

Pin No.	Symbol	Name	I/O	Description	Remarks
62	P116	KD2	I	Model discrimination input	Key data input
63	P115	KD1	I		
64	P114	KD0	I		
65	P113	(LED RACK)	O	NC	"L" output (Unused)
66	P112/FIP20	S10	O	FL drive SEG output (FL 駆動用 SEG 出力)	SEG for sending Outputs "L" with XR-P260F, XR-P560F, XR-P760F. Set to NC. (XR-P260F, XR-P560F, XR-760F では "L" を出力。NC)
67	P111/FIP19	S8	O		
68	P110/FIP18	SEG S0	O		
69	P107/FIP17	S1	O		
70	P106/FIP16	S5	O		
71	Vload		—	GND or FLAC	Set to GND with XR-P260F, XR-P560F, XR-P760F and to FLAC with PD-Q160F, PD-F25
72	P105/FIP15	S6	O		
73	P104/FIP14	S7	O		
74	P103/FIP13	S2	O		
75	P102/FIP12	S3	O		
76	P101/FIP11	S4	O		
77	P100/FIP10	S9	O		
78	P97/FIP9	LED STYB	O	Stand by LED output (PD-F25 only)	LED standby
79	P96/FIP8	LED RED	O	Selector LED output	LED red "H" is illuminated.
80	P95/FIP7	LED GR	O		LED green "H" is illuminated.

Selector output and operation
(セレクター出力、動作)

PIN		STOP	Send right	Send left
39	DSLT	L	L	H
40	DSRT	L	H	L

+1 Eject/Load
(+1 イジェクト/ロード)

PIN		STOP	Eject	Loading
56	IN1	L	L	H
57	OUT1	L	H	L

Loading mechanical output
(ローディングメカ出力)

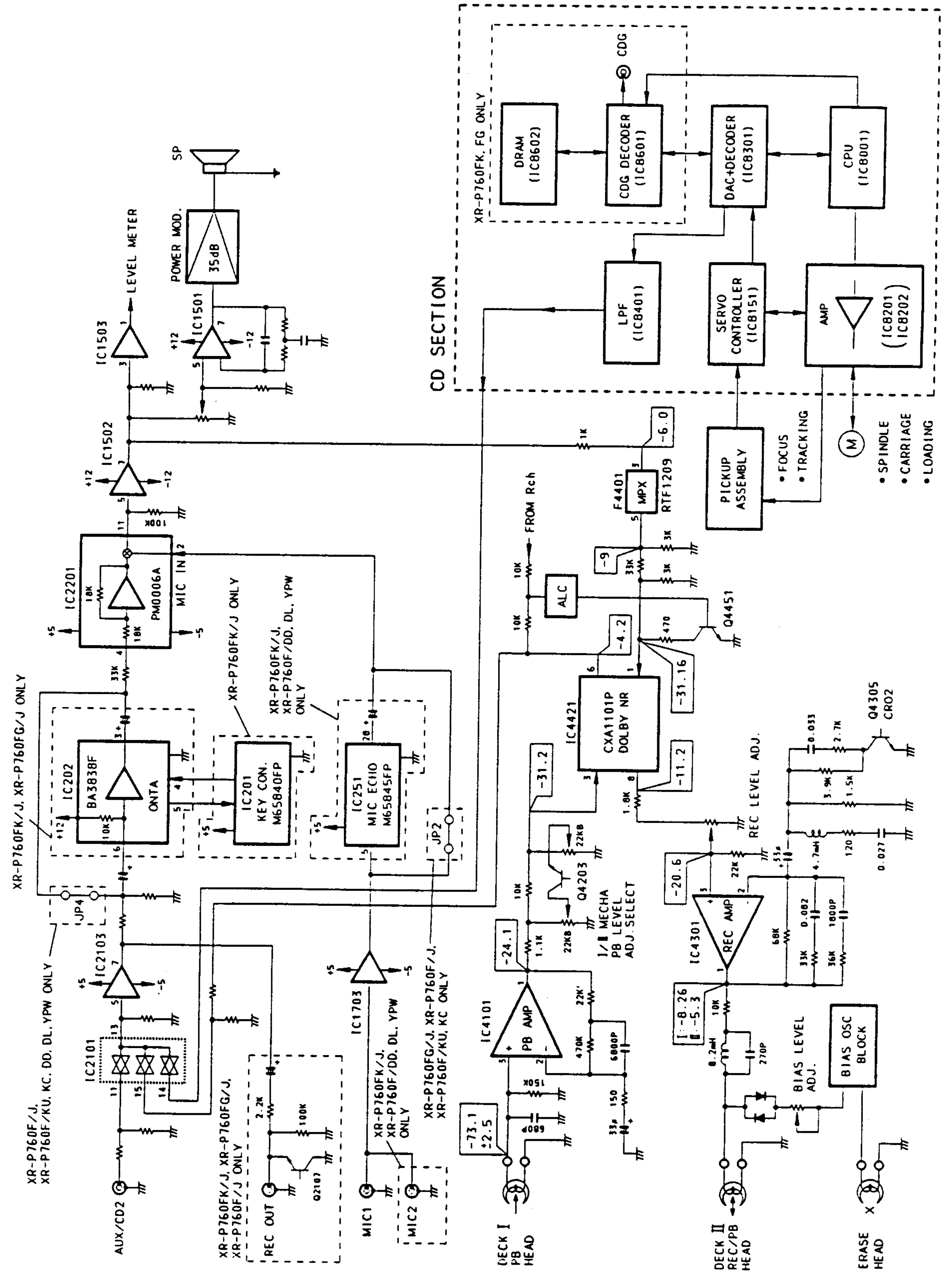
PIN		STOP	Clamp	Return
58	LIN	L	L	H
59	LOUT	L	H	L

Note: The port output contents change with switching of the model discription terminal (pins 62-64) in the following table.

(注意：下表のモデル判別用端子(62-64 pin) の切換えでポート出力内容が変わります。)

PIN		PD-Q160F	PD-F25	XR-P260F	XR-P560F	XR-P760F	XR-P760F/J
64	KD0	H	H	L	H	L	L
63	KD1	H	H	H	L	L	H
62	KD2	H	L	H	H	H	L

4. BLOCK DIAGRAM (ブロックダイアグラム)


CD SECTION
XR-P760FK, FG ONLY
DRAM (IC8602)
CDG DECODER (IC8601)
CDG
DAC+DECODER (IC8301)
CPU (IC8001)
LPF (IC8401)
SERVO CONTROLLER (IC8151)
AMP (IC8201) (IC8202)
PICKUP ASSEMBLY
• FOCUS
• TRACKING
M
• SPINDLE
• CARRIAGE
• LOADING
SP
POWER MOD. 35dB
IC1501
IC1503
LEVEL METER
IC1502
IC2201
PM0006A
MIC IN
IC202
BA3838F
ONTA
IC201
KEY CON.
M65840FP
IC251
MIC ECHO
M65845FP
XR-P760FK/J, XR-P760FG/J ONLY
XR-P760FK/J ONLY
XR-P760FK/J, XR-P760F/DD, DL, YPW ONLY
JP2
JP4
XR-P760F/KU, KC, DD, DL, YPW ONLY
IC2103
IC2101
XR-P760F/J, XR-P760F/KU, KC, DD, DL, YPW ONLY
AUX/CD2
XR-P760FK/J, XR-P760FG/J, XR-P760F/J ONLY
REC OUT
Q2107
IC1703
XR-P760FK/J, XR-P760F/DD, DL, YPW ONLY
XR-P760FG/J, XR-P760F/J, XR-P760F/KU, KC ONLY
MIC1
MIC2
FROM Rch
ALC
F4401
MPX
RTF1209
Q4451
IC4421
CXA1101P
DOLBY NR
-6.0
-9
-4.2
-31.16
-11.2
-31.2
Q4203
I/II MECHA PB LEVEL ADJ. SELECT
-24.1
IC4101
PB AMP
-73.1
±2.5
DECK I PB HEAD
REC LEVEL ADJ.
Q4305
CRO2
-20.6
IC4301
REC AMP
I: -8.26
II: -5.3
BIAS LEVEL ADJ.
BIAS OSC BLOCK
DECK II REC/PB HEAD
ERASE HEAD

PIONEER
The Art of Entertainment

Service Manual

ORDER NO.
RRV1626

STEREO FILE-TYPE CD CASSETTE DECK RECEIVER
XR-P560F

- **Refer to the service manual RRV1515 for XR-P260F /KUXJ.**

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model	Power Requirement	Remarks
	XR-P560F		
MYIXK	○	AC220-230V	
MYXK/EA	○	AC220-230V	
MYXK/EB	○	AC220-230V	
NVXK	○	AC230V	

CONTENTS

1. SAFETY INFORMATION 2
2. CONTRAST OF MISCELLANEOUS PARTS 3
3. SCHEMATIC AND PCB DIAGRAMS 9
4. ADJUSTMENTS 20

PIONEER ELECTRONIC CORPORATION 4-1, Meguro 1-Chome, Meguro-ku, Tokyo 153, Japan
PIONEER ELECTRONICS SERVICE, INC. P.O. Box 1760, Long Beach, CA 90801-1760, U.S.A.
PIONEER ELECTRONIC (EUROPE) N.V. Haven 1087, Keetberglaan 1, 9120 Melsele, Belgium
PIONEER ELECTRONICS ASIACENTRE PTE. LTD. 501 Orchard Road, #10-00 Lane Crawford Place, Singapore 0923

© PIONEER ELECTRONIC CORPORATION 1996

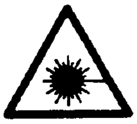
T-IFK MAY 1996 Printed in Japan

1. SAFETY INFORMATION

VARO!
AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.

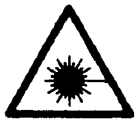
ADVERSEL:
USYNLIG LASERSTRÅLING VED ÅBNING NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION UNDGÅ UDSAETTELSE FOR STRÅLING.

VARNING!
OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD OCH SPÄRREN ÄR URKOPPLAD. BETRAKTA EJ STRÅLEN.



LASER
Kuva 1
Lasersateilyn
varoitusmerkki

WARNING!
DEVICE INCLUDES LASER DIODE WHICH EMITS INVISIBLE INFRARED RADIATION WHICH IS DANGEROUS TO EYES. THERE IS A WARNING SIGN ACCORDING TO PICTURE 1 INSIDE THE DEVICE CLOSE TO THE LASER DIODE.



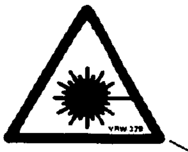
LASER
Picture 1
Warning sign for
laser radiation

IMPORTANT
THIS PIONEER APPARATUS CONTAINS LASER OF CLASS 1.
SERVICING OPERATION OF THE APPARATUS SHOULD BE DONE BY A SPECIALLY INSTRUCTED PERSON.

LASER DIODE CHARACTERISTICS
MAXIMUM OUTPUT POWER: 5 mw
WAVELENGTH: 780-785 nm

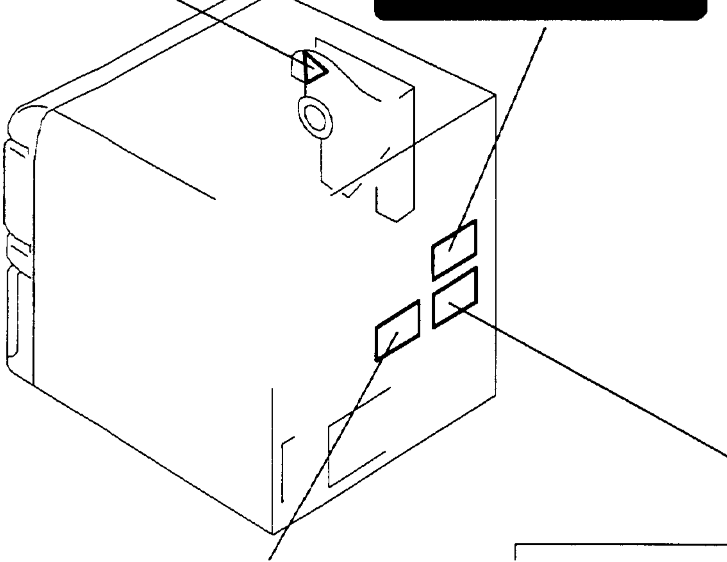
LABEL CHECK

All types



All types

CLASS 1
LASER PRODUCT
ARW1046



Additional Laser Caution

1. Laser Interlock Mechanism
   The position of the switch (S651) for detecting loading state is detected by the system microprocessor, and the design prevents laser diode oscillation when the switch (S651) is not on $\overline{\text{CLMP}}$ terminal side ($\overline{\text{CLMP}}$ signal is OFF or high level.). Thus, the interlock will no longer function if the switch (S651) is deliberately set to $\overline{\text{CLMP}}$ terminal side (low level).
   The interlock also does not function in the test mode *.
   Laser diode oscillation will continue, if pin 1 of M51593FP (IC101) on the PRE AMP BOARD ASSY mounted on the pickup assy is connected to GND, or pin 19 is connected to low level (ON), or else the terminals of Q101 are shorted to each other (fault condition).
2. When the cover is opened, close viewing of the objective lens with the naked eye will cause exposure to a Class 1 laser beam.

* Refer to page 55 in the service manual RRV1515.

ADVARSEL
USYNLIG LASERTRALING VED ÅBNING NAR SIKKERHED SAFBRYDERE ER UDE AF FUNKTION UNDGA UDSÆTTELSE FOR STRALING.

VORSICHT !
UNSICHTBARE LASER-STRAHLUNG TRITT AUS, WENN DECKEL(ODER KLAPPE)GEOFFNET IST! NICHT DEM STRAHL AUSSETZEN!

VARO !
Avattaessa ja suojalukitus ohitettaessa olet alttiina näkymättömälle lasersäteilylle. Älä katso säteeseen.

VARNING !
Osynlig laserstrålning när denna del är öppnad och spärren är urkopplad. Betrakta ej strålen.

ARW1047

MYXK/EA and MYXK/EB types

ADVARSEL
USYNLIG LASERSTRÅLING VED ÅBNING NÅR SIKKERHED SAFBRYDERE ER UDE AF FUNKTION.
UNDGÅ UDSÆTTELSE FOR STRÅLING.

VORSICHT!
UNSICHTBARE LASER-STRAHLUNG TRITT AUS, WENN DECKEL (ODER KLAPPE) GEÖFFNET IST! NICHT DEM STRAHL AUSSETZEN!
ARW1049

MYIXK type

CAUTION
INVISIBLE LASER RADIATION
WHEN OPEN, AVOID
EXPOSURE TO BEAM
ARW1050

NVXK type

2. CONTRAST OF MISCELLANEOUS PARTS

NOTES:

- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex.1 When there are 2 effective digits(any digit apart from 0), such as 560 ohm and 47k ohm(tolerance is shown by J=5%, and K=10%).

$560\,\Omega \rightarrow 56 \times 10^1 \rightarrow 561$ .... RD1/4PU$\boxed{5}\boxed{6}\boxed{1}$J
$47k\,\Omega \rightarrow 47 \times 10^3 \rightarrow 473$ .... RD1/4PU$\boxed{4}\boxed{7}\boxed{3}$J
$0.5\,\Omega \rightarrow 0R5$ .... RN2H$\boxed{0}\boxed{R}\boxed{5}$K
$1\,\Omega \rightarrow 1R0$ .... RS1P$\boxed{1}\boxed{R}\boxed{0}$K

Ex.2 When there are 3 effective digits(such as in high precision metal film resistors).

$5.62k\,\Omega \rightarrow 562 \times 10^1 \rightarrow 5621$ .... RN1/4PC$\boxed{5}\boxed{6}\boxed{2}\boxed{1}$F

■ CONTRAST OF XR-P560F/MYIXK, MYXK/EA, MYXK/EB, NVXK AND XR-P260F/KUXJ

XR-P560F/MYIXK, MYXK/EA, MYXK/EB, NVXK and XR-P260F/KUXJ have the same construction except for the following :

Mark	Symbol & Description	Part No.					Remarks
		XR-P260F /KUXJ	XR-P560F /MYIXK	XR-P560F /MYXK/EA	XR-P560F /MYXK/EB	XR-P560F /NVXK	
	FM/AM TUNER MODULE	AXQ3112	AXQ3214	AXQ3214	AXQ3214	AXQ3214	
NSP	MAIN Asyy	AWM7203	AWM7204	AWM7204	AWM7204	AWM7204	
	├ AF Assy	AWZ8232	AWZ8233	AWZ8233	AWZ8233	AWZ8233	
	├ AMP Assy	AWZ8239	AWZ8240	AWZ8240	AWZ8240	AWZ8240	
	├ REG Assy	AWZ8246	AWZ8293	AWZ8293	AWZ8293	AWZ8293	
NSP	├ PRIMARY Assy	AWZ8248	AWZ8249	AWZ8249	AWZ8249	AWZ8249	
NSP	├ SECONDARY Assy	AWZ8255	AWZ8256	AWZ8256	AWZ8256	AWZ8256	
NSP	└ RELAY Assy	AWZ8262	AWZ8294	AWZ8294	AWZ8294	AWZ8294	
NSP	COMP Assy	AWM7210	AWM7211	AWM7211	AWM7211	AWM7211	
	├ GM-CD Assy	AWZ8263	AWZ8264	AWZ8264	AWZ8264	AWZ8264	
	├ VR Assy	AWZ8270	AWZ8271	AWZ8271	AWZ8271	AWZ8271	
	├ CONTROL Assy	AWZ8277	AWZ8278	AWZ8278	AWZ8278	AWZ8278	
	├ DISPLAY Assy	AWZ8284	AWZ8285	AWZ8285	AWZ8285	AWZ8285	
NSP	├ HOME SW Assy	AWZ8288	AWZ8295	AWZ8295	AWZ8295	AWZ8295	
NSP	└ HOOD SW Assy	AWZ8290	AWZ8296	AWZ8296	AWZ8296	AWZ8296	
	Volume Knob	AAB7069	AAB7046	AAB7046	AAB7046	AAB7046	
	Mic Volume Knob	AAB7070	AAB7068	AAB7068	AAB7068	AAB7068	
	Door Window L	AAK7211	AAK7197	AAK7197	AAK7197	AAK7197	
	Door Window R	AAK7267	AAK7268	AAK7268	AAK7268	AAK7268	
	Door Panel L	AAN7128	AAN7122	AAN7122	AAN7122	AAN7122	
	Door Panel R	AAN7129	AAN7123	AAN7123	AAN7123	AAN7123	
	Door M	AAN7115	AAN7124	AAN7124	AAN7124	AAN7124	
	Earth Screw	Not used	ABA1047	ABA1047	ABA1047	ABA1047	No. 1
	Washer (Between HOME SW Assy and Rack Base)	ABF7002	ABE-053	ABE-053	ABE-053	ABE-053	
	Door Spring L	ABH7084	ABH7093	ABH7093	ABH7093	ABH7093	
	Door Spring R	ABH7085	ABH7094	ABH7094	ABH7094	ABH7094	
	Door M Spring	ABH7090	ABH7096	ABH7096	ABH7096	ABH7096	
	Eject Spring (L)	ABH7102	ABH7028	ABH7028	ABH7028	ABH7028	
	Eject Spring (R)	ABH7103	ABH7029	ABH7029	ABH7029	ABH7029	

Note : The numbers in the remarks column corresspond to the numbers on the exploded diagram.
Refer to "EXPLODED VIEWS".

Mark	Symbol & Description	Part No.					Remarks
		XR-P260F /KUXJ	XR-P560F /MYIXK	XR-P560F /MYXK/EA	XR-P560F /MYXK/EB	XR-P560F /NVXK	
⚠	AC Power Cord	PDG1057	ADG1138	ADG1138	ADG1138	ADG1148	
⚠	Fuse (T5A) (With in AC Plug)	Not used	Not used	Not used	Not used	AEK1046	
NSP	LSR Support	AEC7055	VEC1596	VEC1596	VEC1596	VEC1596	
NSP	Spacer	AEC7056	PNW2488	PNW2488	PNW2488	PNW2488	
⚠	Fuse (FU101:T1.25A)	Not used	AEK1055	AEK1055	AEK1055	AEK1055	
⚠	Fuse (FU101:4A)	REK1082	Not used	Not used	Not used	Not used	
	Front Panel	AMB7319	AMB7320	AMB7320	AMB7320	AMB7320	
	Eject Arm (L)	AMR7074	AMR7024	AMR7024	AMR7024	AMR7024	
	Eject Arm (R)	AMR7075	AMR7025	AMR7025	AMR7025	AMR7025	
	Blind Mold L	AMR7100	AMR7092	AMR7092	AMR7092	AMR7092	
	Blind Mold R	AMR7101	AMR7093	AMR7093	AMR7093	AMR7093	
NSP	Chassis	ANA7034	ANA7030	ANA7030	ANA7030	ANA7030	
	Sub Chassis	ANA7038	ANA7037	ANA7037	ANA7037	ANA7037	
	Rear Panel	ANC7305	ANC7401	ANC7312	ANC7312	ANC7398	
	Front Stay	AND7009	AND7014	AND7014	AND7014	AND7014	
	Rear Stay	AND7010	AND7015	AND7015	AND7015	AND7015	
	Home Lock Stay	AND7012	AND7016	AND7016	AND7016	AND7016	
	Bonnet	ANE7093	ANE7096	ANE7096	ANE7096	ANE7096	
	GND Holder	ANG7072	ANG7080	ANG7080	ANG7080	ANG7080	
	Link M	ANG7076	ANG7081	ANG7081	ANG7081	ANG7081	
	Heat Sink	ANH7033	ANH7027	ANH7027	ANH7027	ANH7027	
⚠	Power Transformer (T1) (AC120V)	ATS7099	Not used	Not used	Not used	Not used	
⚠	Power Transformer (T1) (AC220-230V)	Not used	ATS7098	ATS7098	ATS7098	ATS7098	
⚠	Strain Relief	CM-22C	CM-22B	CM-22B	CM-22B	CM-22B	
	Connector Assy 5P	RKP1682	ADX7045	ADX7045	ADX7045	ADX7045	
	Connector Assy 3P	RKP1683	ADX7046	ADX7046	ADX7046	ADX7046	
	C1 Ceramic Capacitor	Not used	CKDYB102K50	CKDYB102K50	CKDYB102K50	CKDYB102K50	No. 2
	Label	ARW7016	ARW7012	ARW7012	ARW7012	ARW7012	
NSP	Caution Label (F)	Not used	ARW1046	ARW1046	ARW1046	ARW1046	No. 3
NSP	Caution Label	Not used	ARW1049	Not used	Not used	ARW1050	No. 4
NSP	Caution Label	Not used	Not used	ARW1047	ARW1047	Not used	No. 5
	65 Label	ORW1069	Not used	Not used	Not used	Not used	
	Caution Label (G)	Not used	VRW-329	VRW-329	VRW-329	VRW-329	No. 6
	FM Antenna	ADH1017	ADH1019	ADH1019	ADH1019	ADH1019	
	Loop Antenna	ATB7004	ATB7002	ATB7002	ATB7002	ATB7002	
	Front Pad LR	AHA7098	AHA7102	AHA7102	AHA7102	AHA7102	
	Rear Pad LR	AHA7099	AHA7103	AHA7103	AHA7103	AHA7103	
	Packing Case	AHD7233	AHD7238	AHD7238	AHD7238	AHD7238	
	Packing Sheet	AHG7003	AHG7001	AHG7001	AHG7001	AHG7001	
NSP	Polyethylene Bag	AHG7030	AHG1091	AHG1091	AHG1091	AHG1091	
	CD Case Rack	AMR7072	AMR7086	AMR7086	AMR7086	AMR7086	
	Operating Instructions (English)	ARB7056	Not used	Not used	ARB7057	ARB7057	
	Operating Instructions (German/Italian)	Not used	ARC7088	ARC7088	Not used	Not used	
	Operating Instructions (French/Dutch)	Not used	Not used	ARC7087	Not used	Not used	
	Operating Instructions (French/Swedish/Spanish/Portuguese)	Not used	Not used	Not used	ARC7126	Not used	

Note : The numbers in the remarks column corresspond to the numbers on the exploded diagram.
Refer to "EXPLODED VIEWS".

AF ASSY

AWZ8233 and AWZ8232 have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ8232	AWZ8233	
	L3201	Not used	LAU221J	*
	C1006 (0.01 μ F/150V)	ACG1005	Not used	
	C2001,C2002	Not used	CCSQCH101J50	*
	C2044,C2045,C2107,C2108	Not used	CKSQYB102K50	*
	C2105,C2106,C2109-C2112,C3201	Not used	CKSQYF104Z50	*
	C3012-C3015	Not used	CCSQCH150J50	*
	C3017,C3018	CKSQYF104Z50	Not used	
	C4109, C4110, C4211, C4212	Not used	CCSQCH470J50	*
	R2015	RS1/10S153J	RS1/10S752J	
	R2019	RS1/10S331J	RS1/10S132J	
	R2107,R2108	Not used	RD1/4PM100J	*
	R3046	RS1/10S000J	Not used	
	CN10 SPEAKER TERMINAL 4-P	AKE7023	AKE7024	
	J3001 BOARD-IN WIRE	DB020ND0	Not used	
	J3002 BOARD-IN WIRE	DB925ND0	Not used	

Note * : Refer to SCH-2F and SCH-3F.

AMP ASSY

AWZ8240 and AWZ8239 have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ8239	AWZ8240	
	C305,C306	Not used	CCSQCH101J50	*

Note * : Refer to SCH-5F.

REG ASSY

Although AWZ8246 and AWZ8293 are different in part number, they consist of the same components.

PRIMARY ASSY

AWZ8249 and AWZ8248 have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ8248	AWZ8249	
⚠	L101	Not used	ATF-151	*
⚠	C101,C102 (0.01 μ F/250V)	Not used	ACG7005	*
⚠	R101 (2.2M Ω , 1/2W)	ACN-208	Not used	

Note * : Refer to SCH-3F.

SECONDARY ASSY

Although AWZ8255 and AWZ8256 are different in part number, they consist of the same components.

RELAY ASSY

Although AWZ8262 and AWZ8294 are different in part number, they consist of the same components.

GM-CD ASSY

AWZ8264 and AWZ8263 have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ8263	AWZ8264	
	VR8151,VR8152	RCP1103	VRTP6HS223	

VR ASSY

Although AWZ8270 and AWZ8271 are different in part number, they consist of the same components.

CONTROL ASSY

AWZ8278 and AWZ8277 have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ8277	AWZ8278	
	D501	1SS254	Not used	
	D502	Not used	1SS254	*
	L591	Not used	LAU180J	*
	C515,C522	Not used	CKSQYB472K50	*
	C516,C517,C591,C592	Not used	CCSQCH101J50	*
	C595,C596	Not used	CKSQYB102K50	*

Note * : Refer to SCH-4F.

DISPLAY ASSY

Although AWZ8284 and AWZ8285 are different in part number, they consist of the same components.

HOME SW ASSY

Although AWZ8288 and AWZ8295 are different in part number, they consist of the same components.

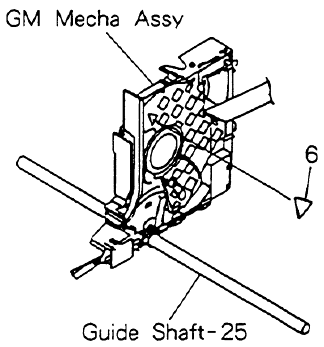
HOOD SW ASSY

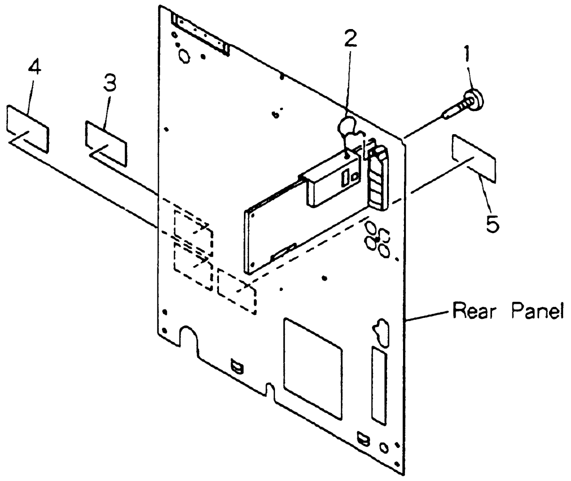
Although AWZ8290 and AWZ8296 are different in part number, they consist of the same components.

■ EXPLODED VIEWS

• EXTERIOR SECTION

Note : The numbers on the exterior section correspond to the numbers in the remarks column of the comparative table.
Refer to "CONTRAST OF MISCELLANEOUS PARTS".



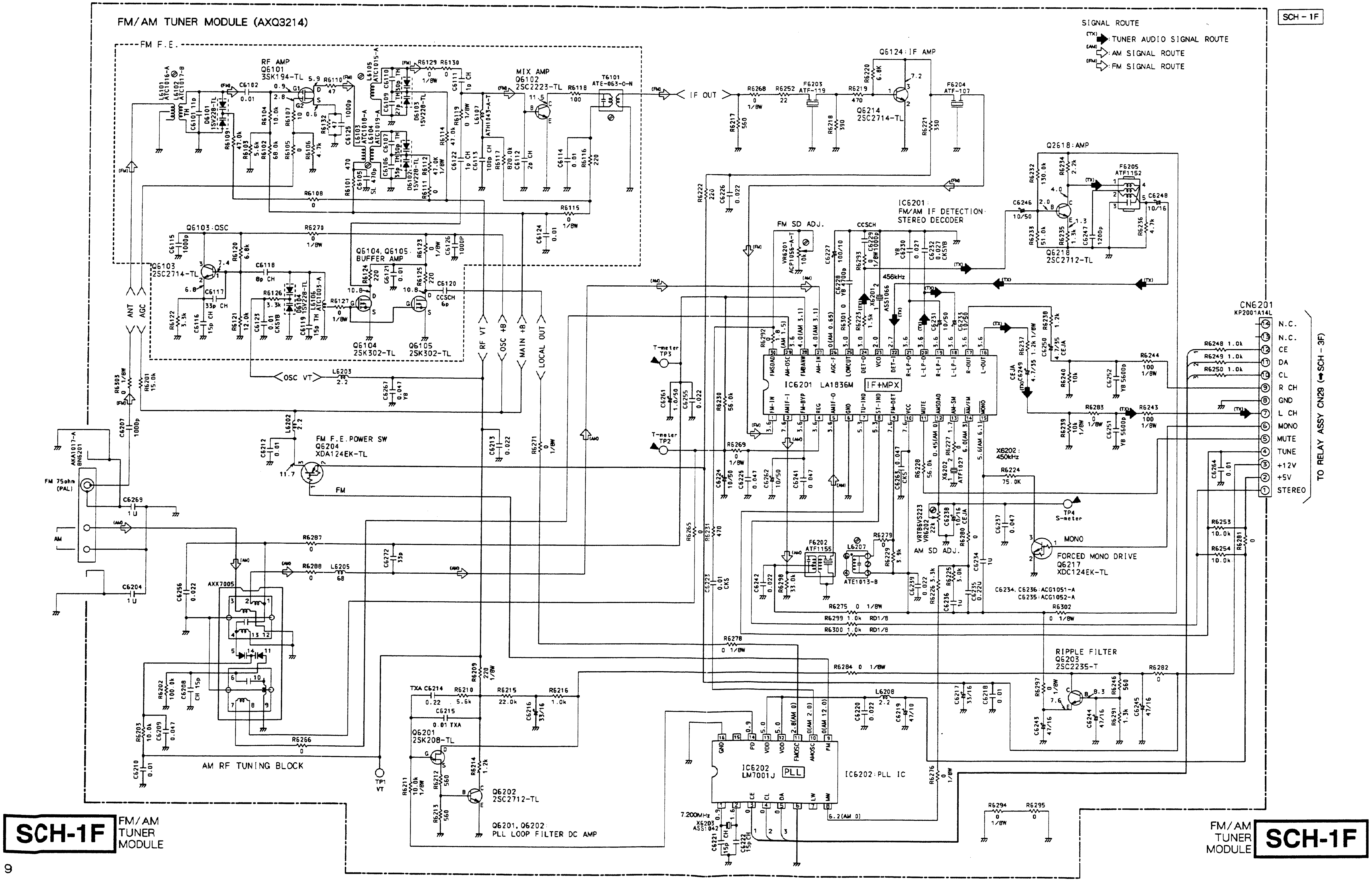


■ PCB PARTS LIST

Mark	No.	Description	Part No.
FM/AM TUNER MODULE (AXQ3214)			
SEMICONDUCTORS			
	IC6201		LA1836M
	IC6202		LM7001J
	Q6102		2SC2223
	Q6203		2SC2235
	Q6202, Q6218		2SC2712
	Q6103, Q6214		2SC2714
	Q6201		2SK208
	Q6104, Q6105		2SK302
	Q6101		3SK194
	Q6204		XDA124EK
	Q6217		XDC124EK
	D6101-D6104		1SV228
COILS AND FILTERS			
	L6106		ATC1003
	L6105		ATC1015
	L6101		ATC1016
	L6102		ATC1017
	L6103		ATC1018
	L6104		ATC1019
	L6207(10.7MHz)		ATE1013
	F6204		ATF-107
	F6203		ATF-119
	F6205		ATF1152
	F6202(450KHz)		ATF1155
	L6107(2.2μH)		ATH1043
	L6202, L6203, L6208		LCTA2R2J3225
	L6205		LCTA680J3225
TRANSFORMER			
	T6101		ATE-063
CAPACITORS			
	C6204, C6234, C6236, C6269(1μF/16V)		ACG1051
	C6120		CCSCH060D50
	C6229		CCSCH102J50
	C6111, C6122		CCSQCH010C50
	C6112		CCSQCH020C50
	C6118		CCSQCH080D50
	C6113		CCSQCH101J50
	C6116, C6208, C6221, C6222		CCSQCH150J50
	C6117		CCSQCH330J50
	C6272		CCSQSL330J50
	C6105		CCSQSL471J50
	C6101		CCSQTH110J50
	C6119		CCSQTH150J50
	C6109		CCSQTH270J50
	C6107, C6110		CCSQTH300J50
	C6106		CCSQTH330J50
	C6261		CEAS010M50
	C6224, C6231, C6233, C6246, C6262		CEAS100M50
	C6227		CEAS101M10
	C6216, C6217		CEAS330M16
	C6219		CEAS470M10
	C6243-C6245		CEAS470M16
	C6238, C6248		CEJA100M16
	C6249, C6250		CEJA4R7M35
	C6215		CFTXA103J50
	C6214		CFTXA224J50
	C6115, C6125, C6126, C6207		CKSQYB102K50
	C6102, C6114, C6121, C6124, C6210		CKSQYB103K50
	C6264		CKSQYB103K50
	C6247		CKSQYB122K50
	C6213		CKSQYB223K50
	C6230		CKSQYB273K50
	C6228		CKSQYB472K50
	C6209, C6237, C6267		CKSQYB473K50
	C6251, C6252		CKSQYB562K50
	C6212, C6218		CKSQYF103Z50
	C6220, C6226, C6239, C6242		CKSQYF223Z50
	C6255, C6256		CKSQYF223Z50
	C6235		CKSQYF224Z25
	C6225, C6241		CKSQYF473Z50
	C6123		CKSYB103K50
	C6232		CKSYB273K50
	C6223		CKSYF103Z50
	C6263		CKSYF473Z50
RESISTORS			
	R6299, R6300		RD1/6PM102J
	R6115, R6119, R6123, R6127, R6129		RS1/8S000J
	R6268-R6271, R6275, R6276, R6278		RS1/8S000J
	R6283, R6284, R6293, R6294, R6297		RS1/8S000J
	R6302, R6303		RS1/8S000J
	R6243, R6244		RS1/8S101J
	R6211, R6239		RS1/8S103J
	R6237		RS1/8S122J
	R6209		RS1/8S221J
	R6112		RS1/8S473J
	VR6201(10kΩ)		ACP1056
	VR6202		VRTB6VS223
		Other Resistors	RS1/10S□□□J
OTHERS			
	X6203	CRYSTAL RESONATOR(7.200MHz)	ASS1042
	X6201	CERAMIC RESONATOR(456KHz)	ASS1066
	X6202	CERAMIC RESONATOR(450KHz)	ATF1027
	BN6201	2P TERMINAL WITH PAL	AKA1017
	CN6201	14P SOCKET	KP200IA14L
		AF RF TUNING BLOCK	AXX7005

3. SCHEMATIC AND PCB DIAGRAMS

3.1 FM/AM TUNER MODULE


FM/AM TUNER MODULE (AXQ3214)
SCH-1F
FM F.E.
SIGNAL ROUTE
(TX): TUNER AUDIO SIGNAL ROUTE
(AM): AM SIGNAL ROUTE
(FM): FM SIGNAL ROUTE
RF AMP Q6101 3SK194-TL
MIX AMP Q6102 2SC2223-TL
T6101 ATE-063-O-N
IF OUT
Q6124: IF AMP
Q6214 2SC2714-TL
F6203 ATF-119
F6204 ATF-107
Q6103: OSC
Q6103 2SC2714-TL
Q6104, Q6105 BUFFER AMP
Q6104 2SK302-TL
Q6105 2SK302-TL
ANT
AGC
RF VT
OSC +B
MAIN +B
LOCAL OUT
OSC VT
L6203 2.2
FM F.E. POWER SW Q6204 XDA124EK-TL
FM
FM 75ohm (PAL)
AKA1017-A BN6201
AM
AXX7005
AM RF TUNING BLOCK
TP1 VT
Q6201 2SK208-TL
Q6202 2SC2712-TL
Q6201, Q6202: PLL LOOP FILTER DC AMP
IC6202 LM7001J PLL
IC6202: PLL IC
7.200MHz X6203 ASS1042
IC6201: FM/AM IF DETECTION STEREO DECODER
IC6201 LA1836M IF+MPX
FM SD ADJ.
VR6201 ACP1056-A-T
456kHz X6201 ASS1066
T-meter TP3
T-meter TP2
F6202 ATF1155
L6207 ATE1013-B
AM SD ADJ.
VR6202 VRTB6VS223
X6202 450kHz
TP4 S-meter
MONO
FORCED MONO DRIVE Q6217 XDC124EK-TL
C6234, C6236: ACG1051-A
C6235: ACG1052-A
Q2618: AMP
Q6218 2SC2712-TL
F6205 ATF1152
RIPPLE FILTER Q6203 2SC2235-T
CN6201 KP2001A14L
14 N.C.
13 N.C.
12 CE
11 DA
10 CL
9 R CH
8 GND
7 L CH
6 MONO
5 MUTE
4 TUNE
3 +12V
2 +5V
1 STEREO
TO RELAY ASSY CN29 (→SCH-3F)
SCH-1F FM/AM TUNER MODULE
FM/AM TUNER MODULE SCH-1F

NOTE FOR SCHEMATIC DIAGRAMS (Type 1A)

1. **When ordering service parts, be sure to refer to "PARTS LIST of EXPLODED VIEWS" or "PCB PARTS LIST".**

2. **Since these are basic circuits, some parts of them or the values of some components may be changed for improvement.**

3. **RESISTORS:**
   Unit: k:kΩ, M:MΩ, or Ω unless otherwise noted.
   Rated power: 1/4W, 1/6W, 1/8W, 1/10W unless otherwise noted.
   Tolerance:(F):±1%, (G):±2%, (K):±10%, (M):±20% or ±5% unless otherwise noted.

4. **CAPACITORS:**
   Unit : p:pF or μF unless otherwise noted.
   Ratings : capacitor (μF) / voltage (V) unless otherwise noted.
   Rated voltage : 50V except for electrolytic capacitors.

5. **COILS:**
   Unit : m:mH or μH unless otherwise noted.

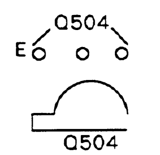
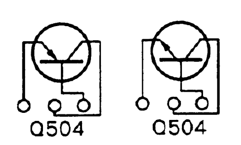
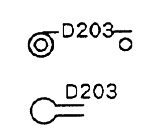
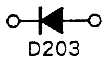
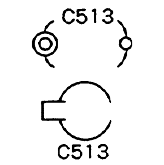
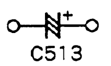
6. **VOLTAGE AND CURRENT:**
   ▭V : Signal voltage at rated output.
   ▭ or ←V :
   DC voltage (V) at no input signal unless otherwise noted.
   Value in ( ) is DC voltage at rated power.
   ⇐mA or ←mA :
   DC current at no input signal unless otherwise noted.

7. **OTHERS:**
   - ⊘ or ⊘ : Adjusting point.
   - ◀ : Measurement point.
   - The ⚠ mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.

8. **SCH – □ ON THE SCHEMATIC DIAGRAM:**
   - SCH– □ indicates the drawing number of the schematic diagram. (SCH stands for schematic diagram.)

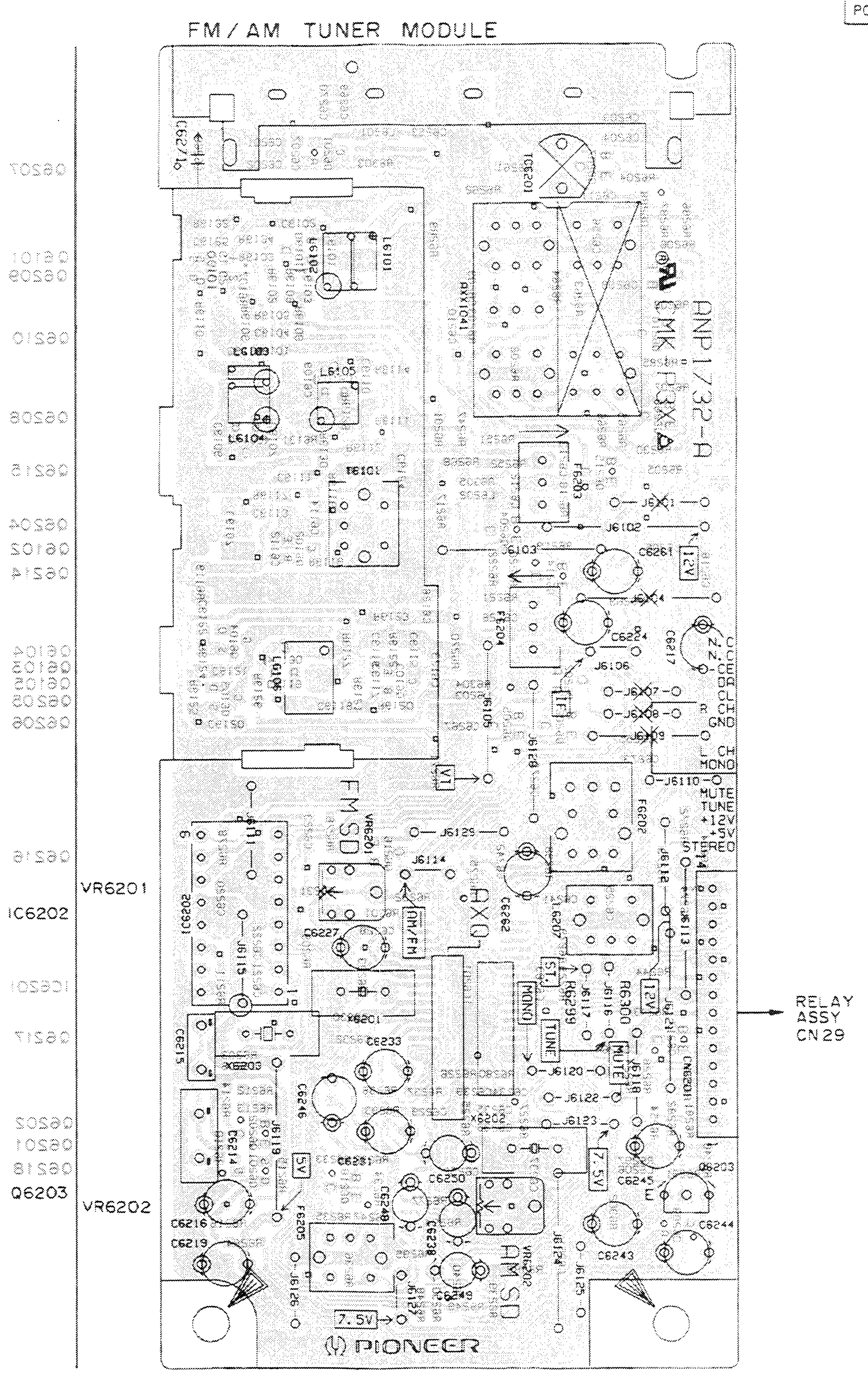
NOTE FOR PCB DIAGRAMS:

1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

Symbol in PCB Diagrams	Symbol in Schematic Diagrams	Part Name
		Transistor
		Diode
		Capacitor (Polarized)

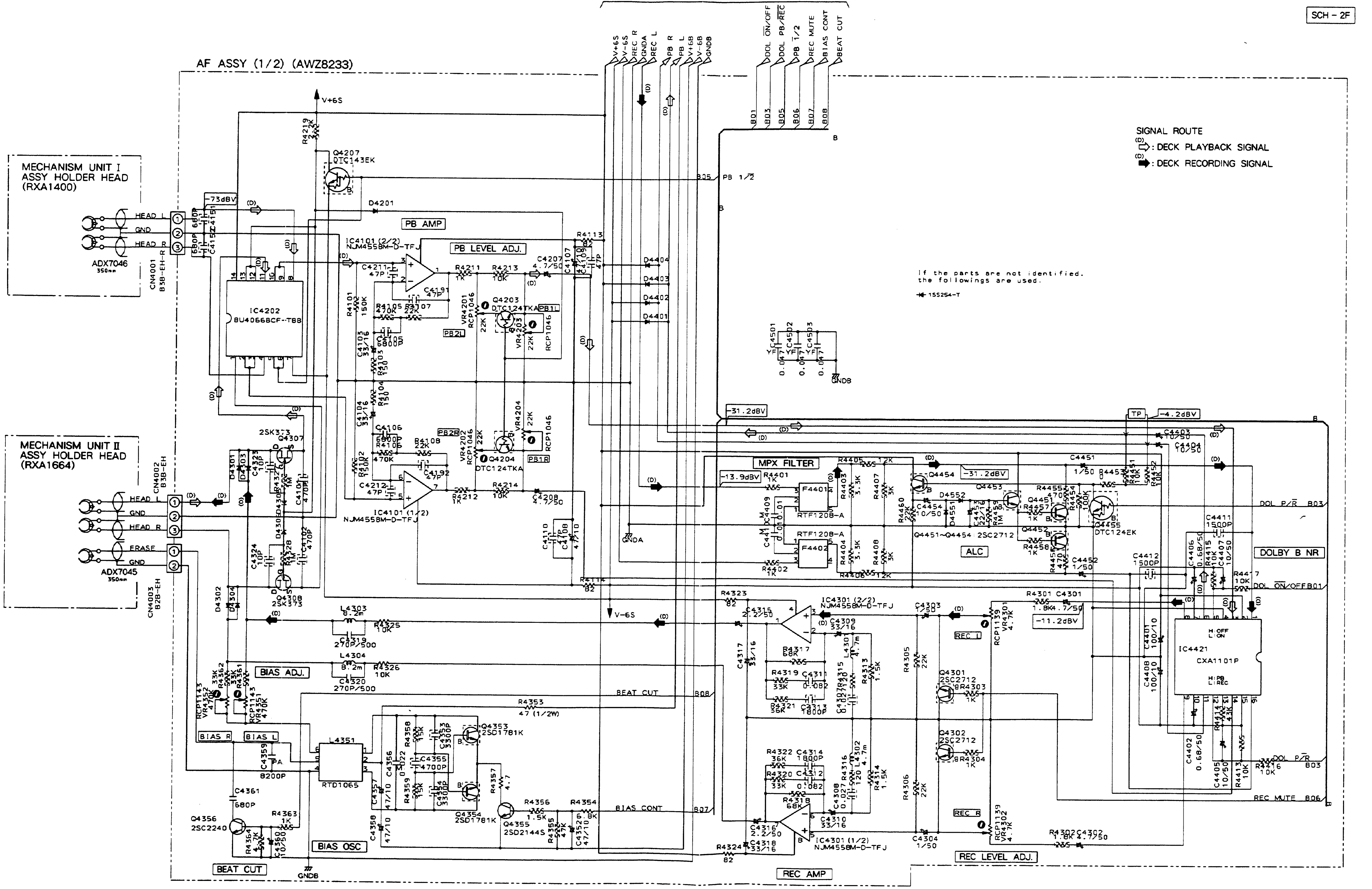
3. The transistor terminal marked with E or [shows the emitter.
4. The diode terminal marked with ◎ or ⊂ shows cathode side.
5. The capacitor terminal marked with ◎ or [shows negative terminal.

PCB – 1F

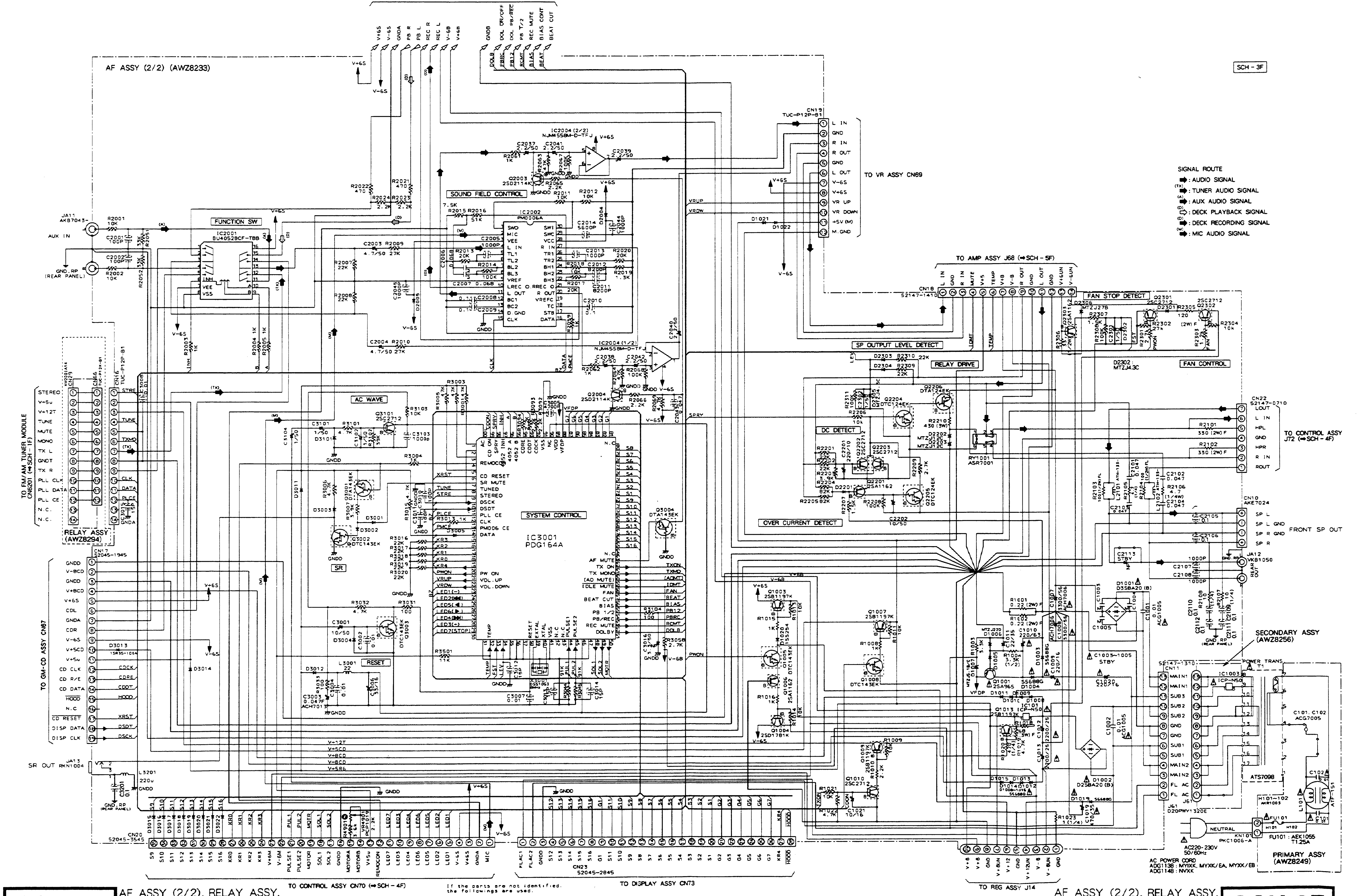

FM / AM TUNER MODULE
VR6201
IC6202
Q6203
VR6202
RELAY ASSY CN29
ANP1732-A
FM SD
AM SD
AM/FM
MONO
TUNE
MUTE
ST
12V
7.5V
5V
L CH
R CH
GND
MONO
MUTE
TUNE
+12V
+5V
STEREO
PIONEER

- This diagram is viewed from the mounted parts side.
- The parts mounted on this PCB include all necessary parts for several destinations.
  For further information for respective destinations, be sure to check with the schematic diagram.

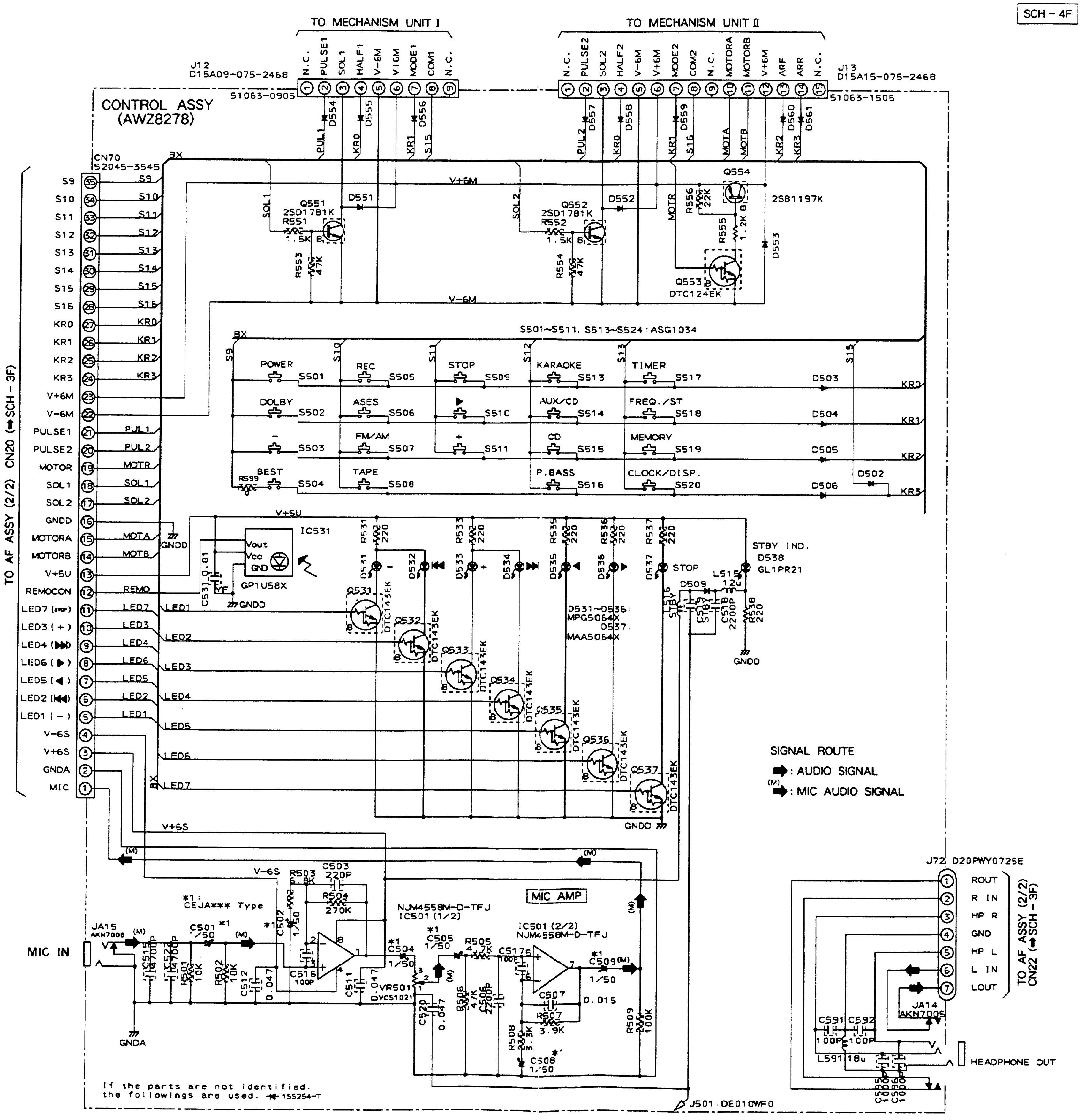
3.2 AF ASSY (1/2)


TO AF ASSY (2/2) (➡SCH - 3F)
SCH - 2F
AF ASSY (1/2) (AWZ8233)
V+6S
V-6S
REC R
GNDA
REC L
PB R
PB L
V+6B
V-6B
GNDB
DOL ON/OFF
DOL PB/REC
PB 1/2
REC MUTE
BIAS CONT
BEAT CUT
B01
B03
B05
B06
B07
B08
SIGNAL ROUTE
(D) ⇨ : DECK PLAYBACK SIGNAL
(D) ➡ : DECK RECORDING SIGNAL
If the parts are not identified, the followings are used.
1SS254-T
MECHANISM UNIT I
ASSY HOLDER HEAD
(RXA1400)
ADX7046
350mm
HEAD L
GND
HEAD R
CN4001
B3B-EH-R
-73dBV
Q4207
DTC143EK
R4219
2.2K
D4201
PB AMP
PB LEVEL ADJ.
IC4101 (2/2)
NJM4558M-D-TFJ
IC4202
BU4066BCF-TBB
R4211
1K
R4213
10K
C4207
4.7/50
Q4203
DTC124TKA
VR4201
RCP1046
22K
VR4203
22K
RCP1046
PB2L
PB1L
PB2R
PB1R
R4113
D4404
D4403
D4402
D4401
C4501
C4502
C4503
0.047
MECHANISM UNIT II
ASSY HOLDER HEAD
(RXA1664)
CN4002
B3B-EH
HEAD L
GND
HEAD R
ERASE
GND
ADX7045
350mm
CN4003
B2B-EH
2SK373
Q4307
Q4308
2SK373
VR4202
RCP1046
22K
VR4204
22K
RCP1046
Q4204
DTC124TKA
R4214
10K
C4208
4.7/50
IC4101 (1/2)
NJM4558M-D-TFJ
-31.2dBV
MPX FILTER
-13.9dBV
R4401
1K
F4401
RTF1208-A
F4402
RTF1208-A
R4402
1K
Q4454
-31.2dBV
Q4453
Q4451~Q4454 2SC2712
ALC
Q4455
DTC124EK
TP
-4.2dBV
C4403
10/50
C4404
10/50
C4411
1500P
C4412
1500P
DOLBY B NR
DOL P/R
DOL ON/OFF
IC4421
CXA1101P
H:OFF
L:ON
H:PB
L:REC
L4303
8.2m
C4319
270P/500
R4325
10K
L4304
8.2m
C4320
270P/500
R4326
10K
BIAS ADJ.
VR4351
RCP1143
470K
VR4352
RCP1143
470K
BIAS R
BIAS L
C4359
8200P
C4361
680P
Q4356
2SC2240
BEAT CUT
GNDB
L4351
RTD1065
Q4353
2SD1781K
Q4354
2SD1781K
Q4355
2SD2144S
R4353
47 (1/2W)
BEAT CUT
BIAS CONT
BIAS OSC
R4323
82
R4324
82
IC4301 (2/2)
NJM4558M-D-TFJ
IC4301 (1/2)
NJM4558M-D-TFJ
REC AMP
C4303
1/50
C4304
1/50
R4301
1.8K
C4301
4.7/50
-11.2dBV
VR4301
RCP1139
4.7K
VR4302
RCP1139
4.7K
REC L
REC R
Q4301
2SC2712
Q4302
2SC2712
R4302
1.8K
C4302
4.7/50
REC LEVEL ADJ.
REC MUTE
R4416
10K

3.3 AF (2/2), RELAY, PRIMARY AND SECONDARY ASSEMBLIES

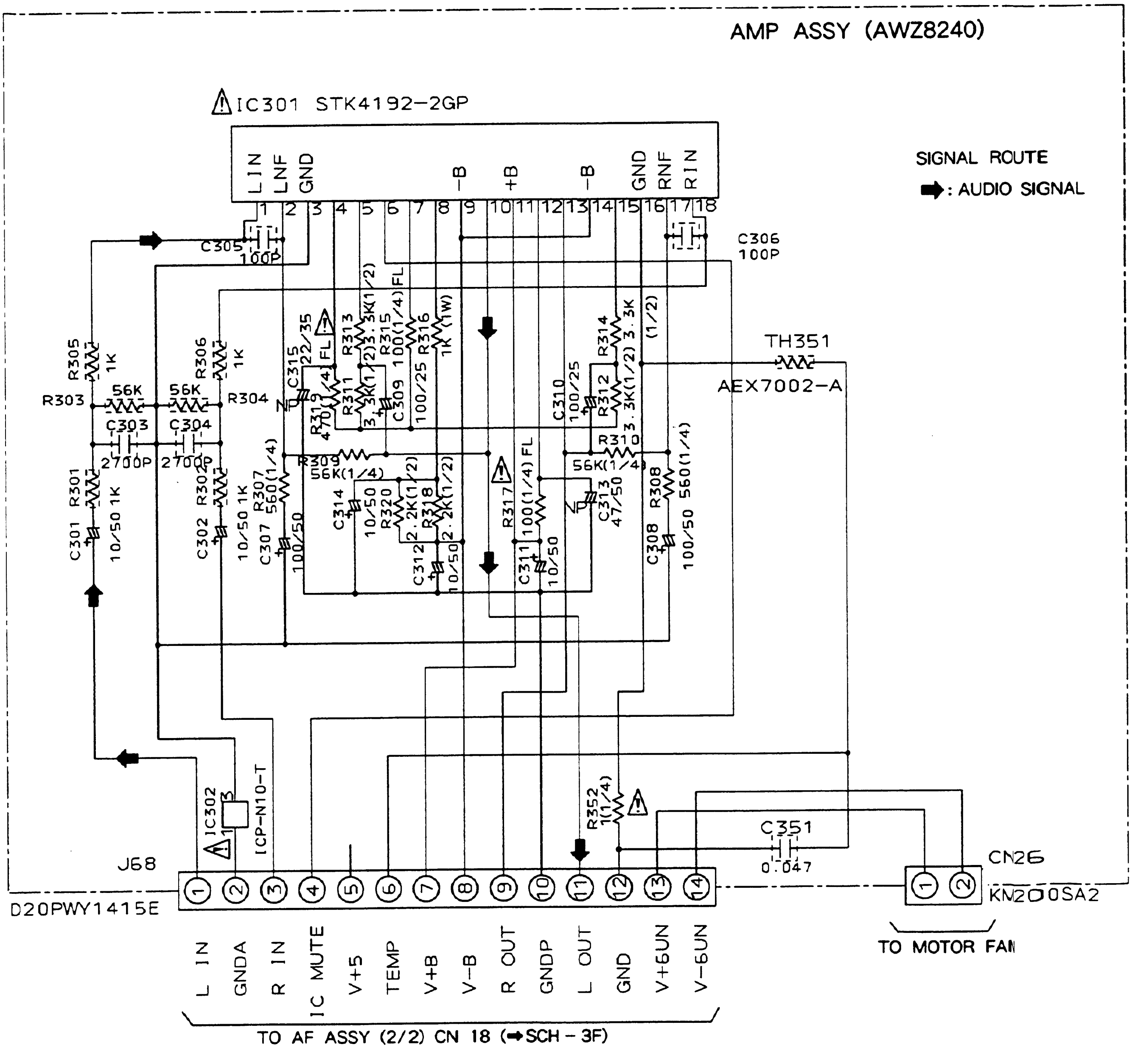

TO AF ASSY (1/2) (⇒SCH-2F)
AF ASSY (2/2) (AWZ8233)
SCH-3F
CN19 TUC-P12P-B1
TO VR ASSY CN69
SIGNAL ROUTE
: AUDIO SIGNAL
: TUNER AUDIO SIGNAL
: AUX AUDIO SIGNAL
: DECK PLAYBACK SIGNAL
: DECK RECORDING SIGNAL
: MIC AUDIO SIGNAL
FUNCTION SW
SOUND FIELD CONTROL
IC2001 BU4052BCF-TBB
IC2002 PM0006A
IC2004 (2/2) NJM4558M-D-TFJ
IC2004 (1/2) NJM4558M-D-TFJ
AUX IN
GND RP (REAR PANEL)
TO AMP ASSY J68 (⇒SCH-5F)
FAN STOP DETECT
FAN CONTROL
SP OUTPUT LEVEL DETECT
RELAY DRIVE
DC DETECT
OVER CURRENT DETECT
RY1001 ASR7001
TO CONTROL ASSY J72 (⇒SCH-4F)
FRONT SP OUT
TO FM/AM TUNER MODULE CN6201 (⇒SCH-1F)
RELAY ASSY (AWZ8294)
AC WAVE
SR
SYSTEM CONTROL
IC3001 PDG164A
RESET
TO GM-CD ASSY CN67
SR OUT RKN1004
STBY
SECONDARY ASSY (AWZ8256)
POWER TRANS
PRIMARY ASSY (AWZ8249)
AC220-230V 50/60Hz
AC POWER CORD
ADG1138 : MYXK, MYXK/EA, MYXK/EB
ADG1148 : NVXK
FU101 : AEK1055 T1.25A
TO CONTROL ASSY CN70 (⇒SCH-4F)
TO DISPLAY ASSY CN73
TO REG ASSY J14
If the parts are not identified, the followings are used.

3.4 CONTROL ASSY


TO MECHANISM UNIT I
TO MECHANISM UNIT II
J12 D15A09-075-2468
J13 D15A15-075-2468
51063-0905
51063-1505
N.C.
PULSE1
SOL1
HALF1
V-6M
V+6M
MODE1
COM1
PULSE2
SOL2
HALF2
MODE2
COM2
MOTORA
MOTORB
ARF
ARR
CONTROL ASSY (AWZ8278)
CN70 52045-3545
S9
S10
S11
S12
S13
S14
S15
S16
KR0
KR1
KR2
KR3
V+6M
V-6M
PULSE1
PULSE2
MOTOR
SOL1
SOL2
GNDD
MOTORA
MOTORB
V+5U
REMOCON
LED7 (STOP)
LED3 (+)
LED4 (⏭)
LED6 (▶)
LED5 (◀)
LED2 (⏮)
LED1 (−)
V-6S
V+6S
GNDA
MIC
TO AF ASSY (2/2) CN20 (➡SCH-3F)
Q551 2SD1781K
Q552 2SD1781K
Q553 DTC124EK
Q554 2SB1197K
D551
D552
D553
D554
D555
D556
D557
D558
D559
D560
D561
R551 1.5K
R552 1.5K
R553 47K
R554 47K
R555 1.2K
R556 22K
S501~S511, S513~S524 : ASG1034
POWER S501
REC S505
STOP S509
KARAOKE S513
TIMER S517
DOLBY S502
ASES S506
▶ S510
AUX/CD S514
FREQ./ST S518
− S503
FM/AM S507
+ S511
CD S515
MEMORY S519
BEST S504
TAPE S508
P.BASS S516
CLOCK/DISP. S520
R599
D502
D503
D504
D505
D506
IC531 GP1U58X
Vout
Vcc
GND
C531 0.01
R531 220
R533 220
R535 220
R536 220
R537 220
D531
D532
D533
D534
D535
D536
D537
STOP
STBY IND. D538 GL1PR21
D509
L515
C516 2200P
R538 220
D531~D536: MPG5054X
D537: MAA5054X
Q531 DTC143EK
Q532 DTC143EK
Q533 DTC143EK
Q534 DTC143EK
Q535 DTC143EK
Q536 DTC143EK
Q537 DTC143EK
SIGNAL ROUTE
➡ : AUDIO SIGNAL
(M)➡ : MIC AUDIO SIGNAL
V+6S
V-6S
R503 6.8K
C503 220P
R504 270K
*1: CEJA*** Type
NJM4558M-D-TFJ IC501 (1/2)
MIC AMP
IC501 (2/2) NJM4558M-D-TFJ
JA15 AKN7008
MIC IN
C501 1/50
C502 1/50
C504 1/50
C505 1/50
C509 1/50
C508 1/50
C511 0.047
C512 0.047
C516 100P
C517 100P
C520 0.047
C506 2200P
C507 0.015
C521 4700P
C522 4700P
R501 10K
R502 10K
R505 4.7K
R506 47K
R507 3.9K
R508 3.3K
R509 100K
VR501 VCS1021
GNDA
GNDD
J72 D20PWY0725E
ROUT
R IN
HP R
GND
HP L
L IN
LOUT
TO AF ASSY (2/2) CN22 (➡SCH-3F)
JA14 AKN7005
C591 100P
C592 100P
L591 18u
C535 100P
C536 100P
C590 100P
HEADPHONE OUT
J501 DE010WF0
If the parts are not identified, the followings are used. → 155254-T

3.5 AMP ASSY

SCH - 5F


AMP ASSY (AWZ8240)
IC301 STK4192-2GP
LIN
LNF
GND
-B
+B
-B
GND
RNF
RIN
SIGNAL ROUTE
: AUDIO SIGNAL
C305 100P
C306 100P
R305 1K
R306 1K
R303 56K
R304 56K
C303 2700P
C304 2700P
C301 10/50
R301 1K
C302 10/50
R302 1K
C307 100/50
R307 560(1/4)
C315 22/35
R319 470(1/4) FL
R311 3.3K(1/2)
R313 3.3K(1/2)
C309 100/25
R315 100(1/4) FL
R316 1K (1W)
R309 56K(1/4)
C314 10/50
R320 2.2K(1/2)
R318 2.2K(1/2)
C312 10/50
R317 100(1/4) FL
C311 10/50
C310 100/25
R312 3.3K(1/2)
R314 3.3K (1/2)
R310 56K(1/4)
C313 47/50
C308 100/50
R308 560(1/4)
TH351 AEX7002-A
IC302 ICP-N10-T
R352 1(1/4)
C351 0.047
J68 D20PWY1415E
CN26 KN2□0SA2
TO MOTOR FAN
L IN
GNDA
R IN
IC MUTE
V+5
TEMP
V+B
V-B
R OUT
GNDP
L OUT
GND
V+6UN
V-6UN
TO AF ASSY (2/2) CN 18 (➡SCH - 3F)

AMP ASSY **SCH-5F**

4. ADJUSTMENTS

Adjustment of XR-P560F/MYIXK, MYXK/EA,MYXK/EB and NVXK are the same as thoes of XR-P260F/KUXJ except for the following:

4.1 TUNER SECTION

■ FM TUNER SECTION

- Set the mode selector to FM BAND.
- Connect the wiring as shown in Fig. 1

Step No.	Adjustment Title	FM SG (1 kHz, ± 75kHz dev.) Frequency (MHz)	FM SG (1 kHz, ± 75kHz dev.) Level (dB µ V)	Reception Frequency Display	Adjustment Location	Specifications
1	Center Adjustment	98	80	98MHz	L6207	Adjust so that the DC voltage between IC6201 - Pin 4 and Pin 28 (or ⊕ leads of C6224 and C6261) becomes 0V ± 50mV.
2	Front End Sensitivity Adjustment	106	Low input (0 to 30)	106MHz	L6104 L6105 L6102 T6101	After adjusting L6104 and L6105 so that the DC voltage between IC6201 - Pin 12 and GND (or ⊕ leads of C6238 and GND) becomes at maximum level, adjust T6101 and L6102.
3	Stereo Distortion	98	80	98MHz	T6101	Minimize the distortion with 1/8 rotation of the core.
4	TUNED IND. Lighting Level	98	15 (± 2 dB)	98MHz	VR6201	Adjust so that the indicator of TUNED IND. starts to light up.

Note :

- Before adjusting, make sure there is no gap between L6101 and L6102 and between L6103 and L6104. If there is a gap between them, bring them into contact with each other first, and then make adjustments.
- Make indicator adjustments in order of AM → FM.
- Adjustment sequence : L6104 → L6105 → L6102 → T6101

■ AM TUNER SECTION

- Set the mode selector to AM BAND.
- Connect the wiring as shown in Fig. 1

Step No.	Adjustment Title	AM SG (400Hz, 30% Mod.) Frequency (kHz)	AM SG (400Hz, 30% Mod.) Level (dB µ V/m)	Reception Frequency Display	Adjustment Location	Specifications
1	TUNED IND. Lighting Level	999	47 (± 2)	999kHZ	VR6202	Adjust so that the indicator of TUNED IND. starts to light up.

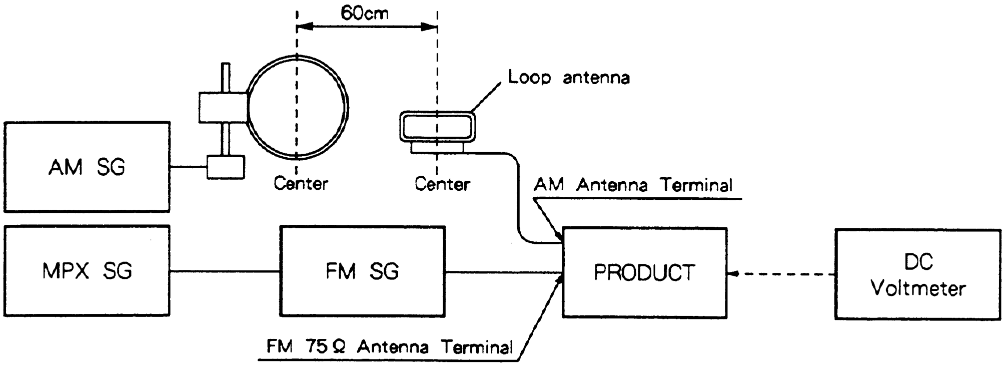

60cm
Loop antenna
AM SG
Center
Center
AM Antenna Terminal
MPX SG
FM SG
PRODUCT
DC Voltmeter
FM 75 Ω Antenna Terminal

Fig. 1 AM and FM Adjustment Wiring Diagram

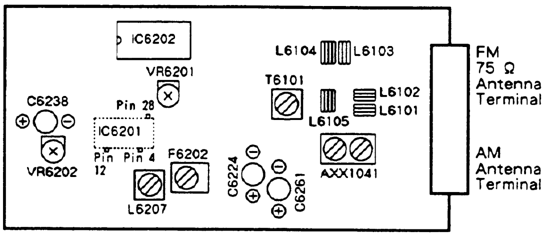
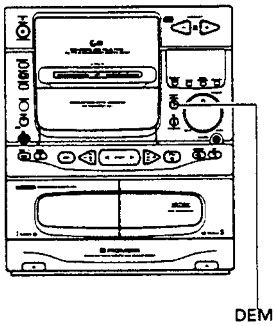

IC6202
VR6201
C6238
Pin 28
IC6201
Pin 12
Pin 4
VR6202
F6202
L6207
C6224
C6261
L6104
L6103
T6101
L6102
L6101
L6105
AXX1041
FM 75 Ω Antenna Terminal
AM Antenna Terminal

Fig. 2 Adjustment Point

Service Manual

PIONEER
The Art of Entertainment



ORDER NO.
RRV1515

STEREO FILE–TYPE CD CASSETTEDECK RECEIVER

XR-P260F

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model	Power Requirement	The voltage can be converted by the following method.
	XR-P260F		
KUXJ	○	AC120V	————————
KCXJ	○	AC120V	————————
DDXJ	○	AC110–127V/220–230V/240V	With the voltage selector
DDXJ/NC	○	AC110–127V/220–230V/240V	With the voltage selector
DLXJ/NC	○	AC110–120V/220–230V/240V	With the voltage selector
YPWXJ	○	AC240V	————————

- **For the circuit and mechanism descriptions, refer to the service guide RRV1430 for XR–P760F.**

CONTENTS

1. SAFETY INFORMATION 2
2. EXPLODED VIEWS, PACKING AND PARTS LIST 4
3. BLOCK DIAGRAM 17
4. SCHEMATIC AND PCB CONNECTION DIAGRAMS 18
5. PCB PARTS LIST 43
6. ADJUSTMENTS 49
7. IC INFORMATION 59
8. DISASSEMBLY 62
9. FL INFORMATION 65
10. PANEL FACILITIES 66
11. SPECIFICATIONS 68

PIONEER ELECTRONIC CORPORATION 4-1, Meguro 1-Chome, Meguro-ku, Tokyo 153, Japan
PIONEER ELECTRONICS SERVICE, INC. P.O. Box 1760, Long Beach, CA 90801-1760, U.S.A.
PIONEER ELECTRONIC (EUROPE) N.V . Haven 1087, Keetberglaan 1, 9120 Melsele, Belgium
PIONEER ELECTRONICS ASIACENTRE PTE. LTD. 501 Orchard Road, #10-00 Lane Crawford Place, Singapore 0923

© PIONEER ELECTRONIC CORPORATION 1996
T–DFY FEB. 1996 Printed in Japan

1. SAFETY INFORMATION

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual. Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING

Lead in solder used in this product is listed by the California Health and Welfare agency as a known reproductive toxicant which may cause birth defects or other reproductive harm (California Health & Safety Code, Section 25249.5).

When servicing or handling circuit boards and other components which contain lead in solder, avoid unprotected skin contact with the solder. Also, when soldering do not inhale any smoke or fumes produced.

NOTICE

(FOR CANADIAN MODEL ONLY)

Fuse symbols (fast operating fuse) and/or (slow operating fuse) on PCB indicate that replacement parts must be of identical designation.

REMARQUE

(POUR MODÈLE CANADIEN SEULEMENT)

Les symboles de fusible (fusible de type rapide) et/ou (fusible de type lent) sur CCI indiquent que les pièces de remplacement doivent avoir la même désignation.

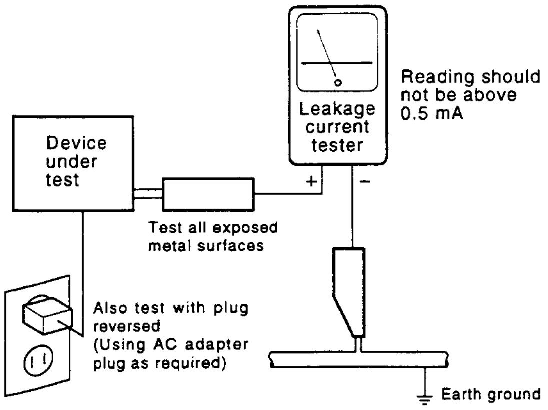
(FOR USA MODEL ONLY)

1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60 Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5 mA.


Reading should not be above 0.5 mA
Leakage current tester
+
-
Device under test
Test all exposed metal surfaces
Also test with plug reversed (Using AC adapter plug as required)
Earth ground

AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage , etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with a ⚠ on the schematics and on the parts list in this Service Manual.

The use of a substitute replacement component which dose not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

(FOR EUROPEAN MODEL ONLY)

VARO !
AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.

ADVERSEL:
USYNLIG LASERSTRÅLING VED ÅBNING NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION UNDGÅ UDSAETTELSE FOR STRÅLING.

VARNING !
OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD OCH SPÄRREN ÄR URKOPPLAD. BETRAKTA EJ STRÅLEN.

LASER
Kuva 1
Lasersateilyn
varoitusmerkki

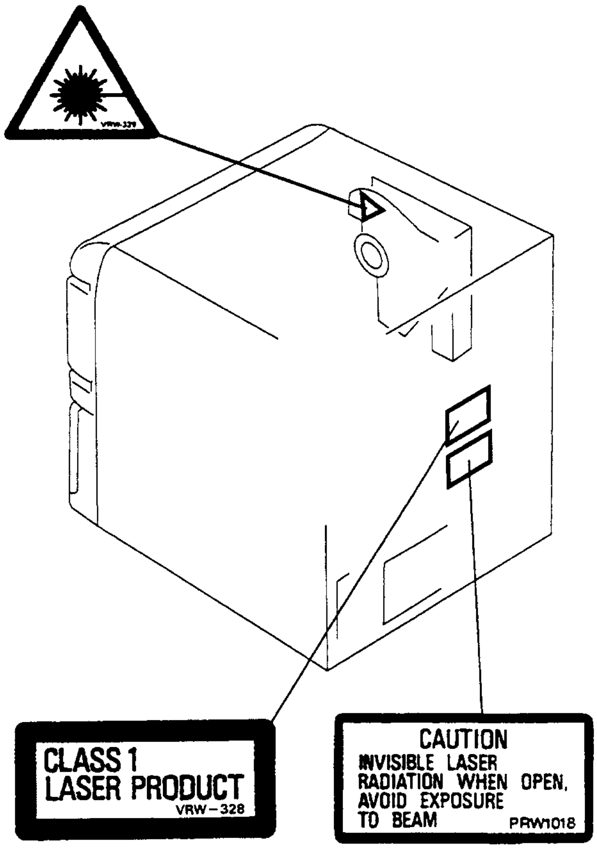
WARNING !
DEVICE INCLUDES LASER DIODE WHICH EMITS INVISIBLE INFRARED RADIATION WHICH IS DANGEROUS TO EYES. THERE IS A WARNING SIGN ACCORDING TO PICTURE 1 INSIDE THE DEVICE CLOSE TO THE LASER DIODE.

IMPORTANT
THIS PIONEER APPARATUS CONTAINS LASER OF CLASS 1.
SERVICING OPERATION OF THE APPARATUS SHOULD BE DONE BY A SPECIALLY INSTRUTED PERSON.

LASER DIODE CHARACTERISTICS
MAXIMUM OUTPUT POWER: 5 mw
WAVELENGTH: 780 – 785 nm

LASER
Picture 1
Warning sign for laser radiation

LABEL CHECK (for DLXJ/NC and YPWXJ types)



Additional Laser Caution

1. Laser Interlock Mechanism
   The position of the switch (S651) for detecting loading state is detected by the system microprocessor, and the design prevents laser diode oscillation when the switch (S651) is not on $\overline{\text{CLMP}}$ terminal side ($\overline{\text{CLMP}}$ signal is OFF or high level.) Thus, the interlock will no longer function if the switch (S651) is deliberately set to $\overline{\text{CLMP}}$ terminal side. (low level)
   The interlock also does not function in the test mode*.
   Laser diode oscillation will continue, if pin 1 of M51593FP (IC101) on the PRE-AMP BOARD ASSY mounted on the pickup assembly is connected to GND, or pin 19 is connected to low level (ON), or else the terminals of Q101 are shorted to each other (fault condition).

2. When the cover is opened, close viewing of the objective lens with the naked eye will cause exposure to a Class 1 laser beam.

** Refer to page 55.*

2. EXPLODED VIEWS, PACKING AND PARTS LIST

NOTES :

- *Parts marked by " NSP " are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by " ◉ "are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

2.1 EXTERIOR

■ Contrast of XR–P260F/KUXJ, KCXJ, DDXJ, DDXJ/NC, DLXJ/NC and YPWXJ

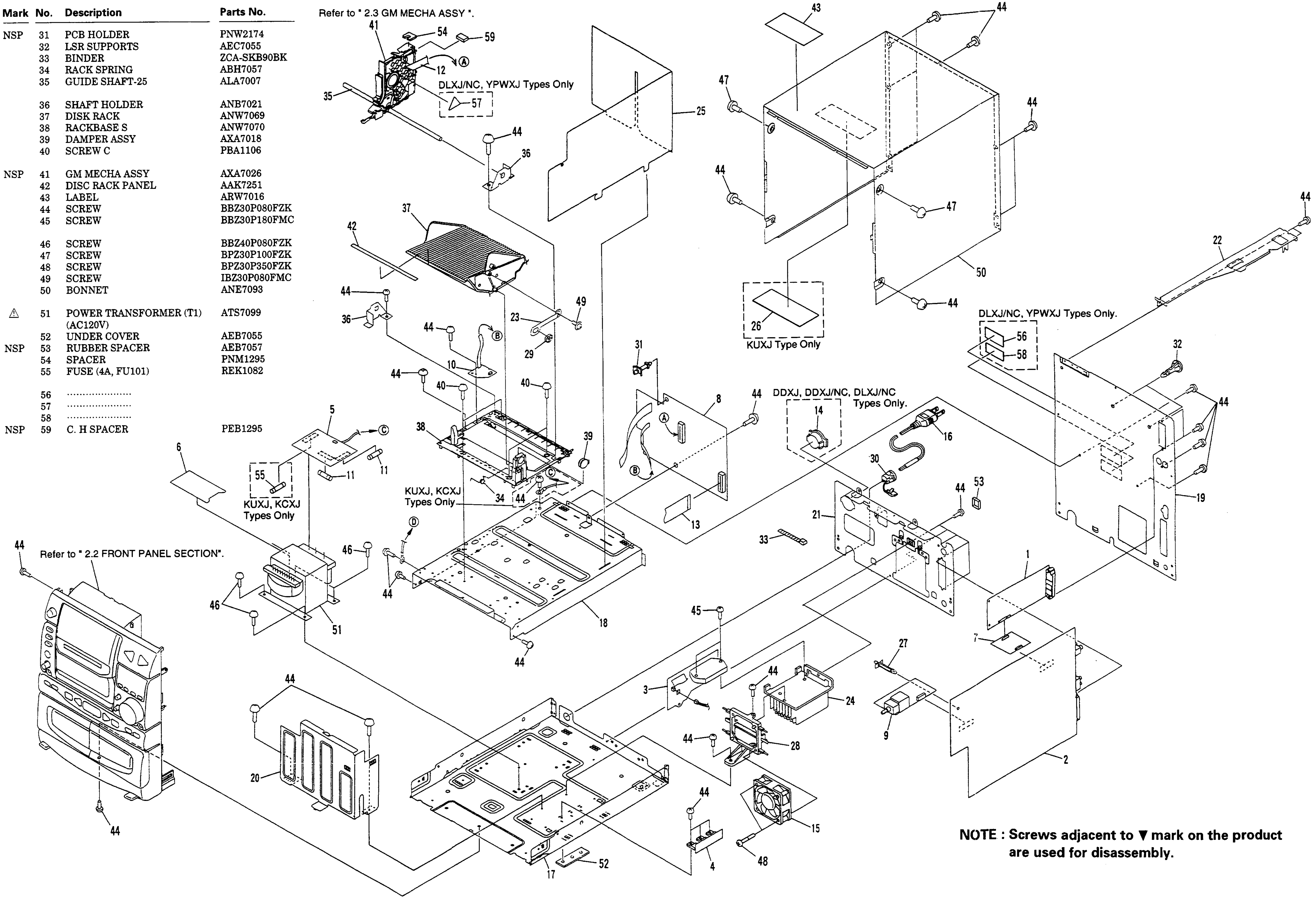
XR-P260F/KUXJ, KCXJ, DDXJ, DDXJ/NC, DLXJ/NC and YPWXJ have the same construction except for the following:

Mark	No.	Description	Part No.						Remarks
			KUXJ type	KCXJ type	DDXJ type	DDXJ/NC type	DLXJ/NC type	YPWXJ type	
	2	AF Assy	AWZ8232	AWZ8232	AWZ8234	AWZ8234	AWZ8234	AWZ8234	
	3	AMP Assy	AWZ8239	AWZ8239	AWZ8241	AWZ8241	AWZ8241	AWZ8241	
NSP	5	PRIMARY Assy	AWZ8248	AWZ8248	AWZ8250	AWZ8250	AWZ8346	AWZ8251	
NSP	6	SECONDARY Assy	AWZ8255	AWZ8255	AWZ8257	AWZ8257	AWZ8257	AWZ8257	
	8	GM–CD Assy	AWZ8263	AWZ8263	AWZ8265	AWZ8265	AWZ8265	AWZ8265	
	9	VR Assy	AWZ8270	AWZ8270	AWZ8272	AWZ8272	AWZ8272	AWZ8272	
⚠	11	Fuse (T1.25A, FU102)	Not used	Not used	AEK1055	AEK1055	AEK1055	Not used	
⚠	11	Fuse (T1.25A, FU103)	Not used	Not used	AEK1055	AEK1055	AEK1055	AEK1055	
⚠	14	Voltage Selector (S1)	Not used	Not used	AKX7002	AKX7002	AKX7002	Not used	
⚠	16	AC Power Cord	PDG1057	PDG1057	ADG1157	ADG1157	PDG1058	ADG1159	
	19	Rear Panel	ANC7305	ANC7306	ANC7307	ANC7308	ANC7309	ANC7310	
	26	65 Label	ORW1069	Not used	Not used	Not used	Not used	Not used	
⚠	30	Strain Relief	CM–22C	CM–22C	CM–22B	CM–22B	CM–22B	CM–22B	
⚠	51	Power Transformer (T1) (AC120V)	ATS7099	ATS7100	Not used	Not used	Not used	Not used	
⚠	51	Power Transformer (T1) (AC 110-127V/220-230V/240V)	Not used	Not used	ATS7101	ATS7101	ATS7101	Not used	
⚠	51	Power Transformer (T1) (AC 240V)	Not used	Not used	Not used	Not used	Not used	ATS7122	
⚠	55	Fuse (4A, FU101)	REK1082	REK1082	Not used	Not used	Not used	Not used	
NSP	56	Caution Label (F)	Not used	Not used	Not used	Not used	VRW–328	VRW–328	
	57	Caution Label (G)	Not used	Not used	Not used	Not used	VRW–329	VRW–329	
	58	Caution Label	Not used	Not used	Not used	Not used	PRW1018	PRW1018	

■ Parts List for XR–P260F/KUXJ

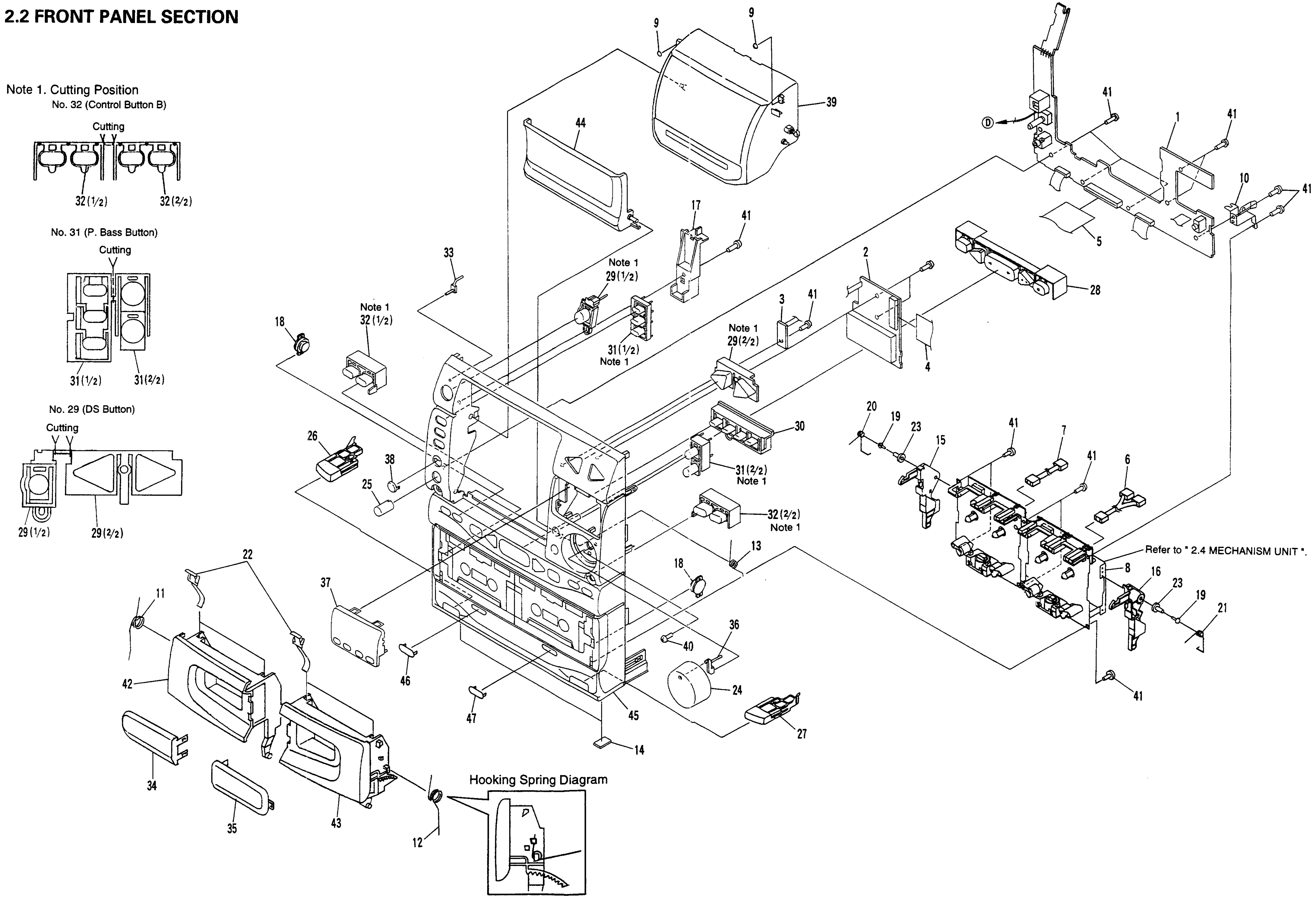
Mark	No.	Description	Parts No.
	1	FM/AM TUNER MODULE	AXQ3112
	2	AF ASSY	AWZ8232
	3	AMP ASSY	AWZ8239
	4	REG ASSY	AWZ8246
NSP	5	PRIMARY ASSY	AWZ8248
NSP	6	SECONDARY ASSY	AWZ8255
NSP	7	RELAY ASSY	AWZ8262
	8	GM–CD ASSY	AWZ8263
	9	VR ASSY	AWZ8270
NSP	10	HOME SW ASSY	AWZ8288
	11	....	
	12	22P F.F.C/30V	ADD7016
	13	19P F.F.C/30V	ADD7022
	14	....	
	15	DC FAN MOTOR	AXM7003
⚠	16	AC POWER CORD	PDG1057
NSP	17	CHASSIS	ANA7034
	18	SUB SHASSIS	ANA7038
	19	REAR PANEL	ANC7305
	20	FRONT STAY	AND7009
	21	REAR STAY	AND7010
	22	HOME LOCK STAY	AND7012
	23	LINK M	ANG7076
	24	HEAT SINK	ANH7033
	25	CD COVER	AAK7204
	26	65 LABEL	ORW1069
	27	SPACER	AEC7056
	28	MOLD A	AMR7005
	29	LINK HOLDER	AMR7087
⚠	30	STRAIN RELIEF	CM–22C

Mark	No.	Description	Parts No.
NSP	31	PCB HOLDER	PNW2174
	32	LSR SUPPORTS	AEC7055
	33	BINDER	ZCA-SKB90BK
	34	RACK SPRING	ABH7057
	35	GUIDE SHAFT-25	ALA7007
	36	SHAFT HOLDER	ANB7021
	37	DISK RACK	ANW7069
	38	RACKBASE S	ANW7070
	39	DAMPER ASSY	AXA7018
	40	SCREW C	PBA1106
NSP	41	GM MECHA ASSY	AXA7026
	42	DISC RACK PANEL	AAK7251
	43	LABEL	ARW7016
	44	SCREW	BBZ30P080FZK
	45	SCREW	BBZ30P180FMC
	46	SCREW	BBZ40P080FZK
	47	SCREW	BPZ30P100FZK
	48	SCREW	BPZ30P350FZK
	49	SCREW	IBZ30P080FMC
	50	BONNET	ANE7093
⚠	51	POWER TRANSFORMER (T1) (AC120V)	ATS7099
	52	UNDER COVER	AEB7055
NSP	53	RUBBER SPACER	AEB7057
	54	SPACER	PNM1295
	55	FUSE (4A, FU101)	REK1082
	56	....	
	57	....	
	58	....	
NSP	59	C. H SPACER	PEB1295


Refer to " 2.3 GM MECHA ASSY ".
41
54
59
12
Ⓐ
35
DLXJ/NC, YPWXJ Types Only
57
44
36
25
43
44
47
44
44
47
50
44
22
44
37
42
44
36
44
Ⓑ
23
49
29
10
44
40
40
38
39
Ⓒ
34
44
KUXJ, KCXJ Types Only
5
Ⓒ
11
11
55
KUXJ, KCXJ Types Only
6
Ⓓ
46
44
46
51
18
44
Refer to " 2.2 FRONT PANEL SECTION".
44
44
20
17
52
26
KUXJ Type Only
31
8
Ⓐ
Ⓑ
13
44
DDXJ, DDXJ/NC, DLXJ/NC Types Only.
14
16
30
21
33
44
53
DLXJ/NC, YPWXJ Types Only.
56
58
32
44
19
1
7
45
3
44
24
28
44
15
48
44
4
27
9
2

NOTE : Screws adjacent to ▼ mark on the product are used for disassembly.

2.2 FRONT PANEL SECTION


Note 1. Cutting Position
No. 32 (Control Button B)
Cutting
32 (1/2)
32 (2/2)
No. 31 (P. Bass Button)
Cutting
31 (1/2)
31 (2/2)
No. 29 (DS Button)
Cutting
29 (1/2)
29 (2/2)
9
9
39
44
41
1
41
10
41
D
5
28
17
41
33
Note 1
29 (1/2)
2
3
41
4
Note 1
32 (1/2)
18
31 (1/2)
Note 1
Note 1
29 (2/2)
30
20
19
23
15
41
7
41
6
26
38
25
31 (2/2)
Note 1
32 (2/2)
Note 1
13
Refer to " 2.4 MECHANISM UNIT ".
8
16
23
19
21
22
11
18
37
36
40
46
42
24
47
45
27
41
14
34
35
43
12
Hooking Spring Diagram

■ Contrast of XR-P260F/KUXJ, KCXJ, DDXJ, DDXJ/NC, DLXJ/NC and YPWXJ

XR-P260F/KUXJ, KCXJ, DDXJ, DDXJ/NC, DLXJ/NC and YPWXJ have the same construction except for the following:

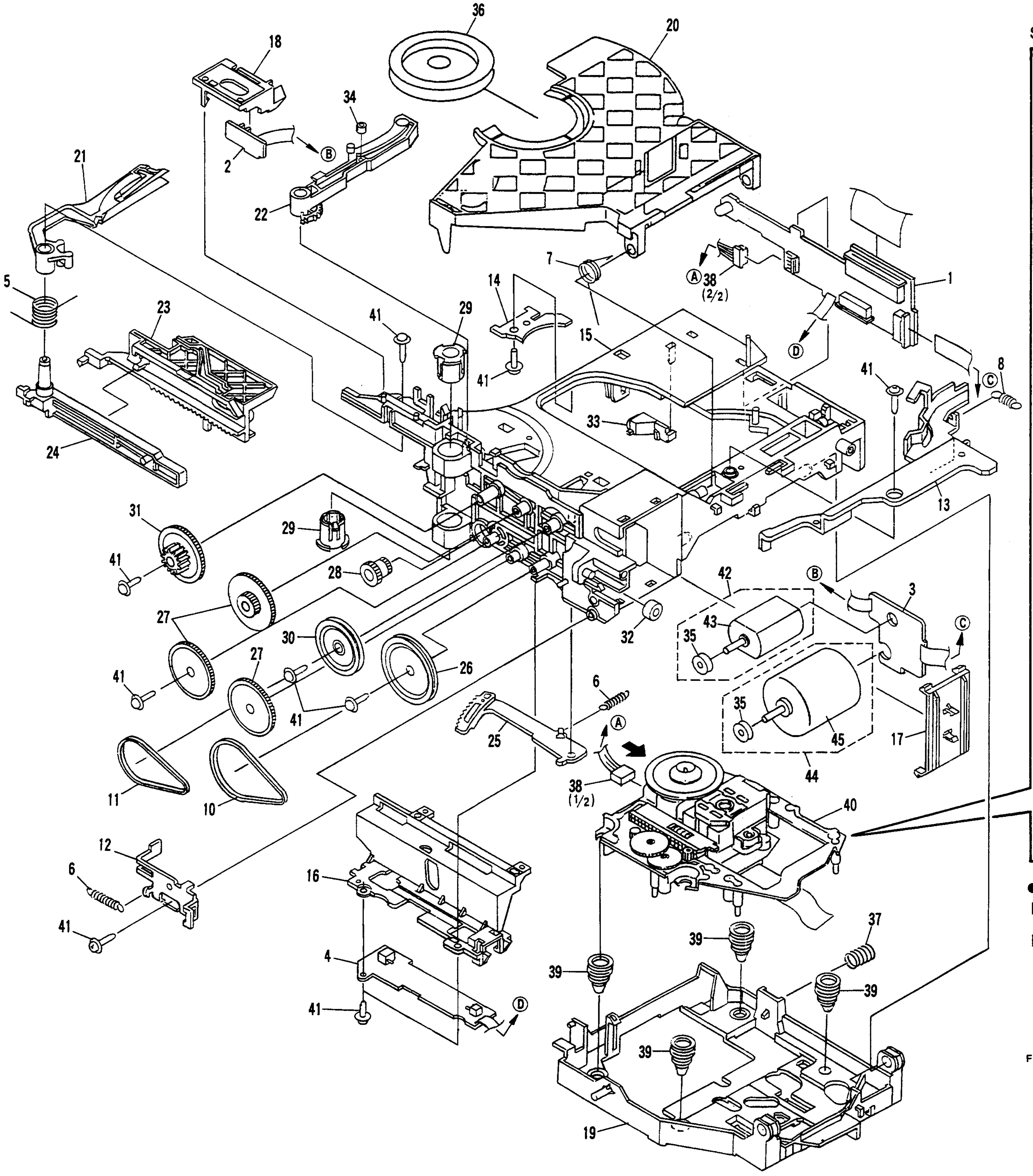
Mark	No.	Description	Part No.						Remarks
			KUXJ type	KCXJ type	DDXJ type	DDXJ/NC type	DLXJ/NC type	YPWXJ type	
	1	CONTROL Assy	AWZ8277	AWZ8277	AWZ8279	AWZ8279	AWZ8348	AWZ8279	
	2	DISPLAY Assy	AWZ8284	AWZ8284	AWZ8286	AWZ8286	AWZ8286	AWZ8286	

■ Parts List for XR-P260F/KUXJ

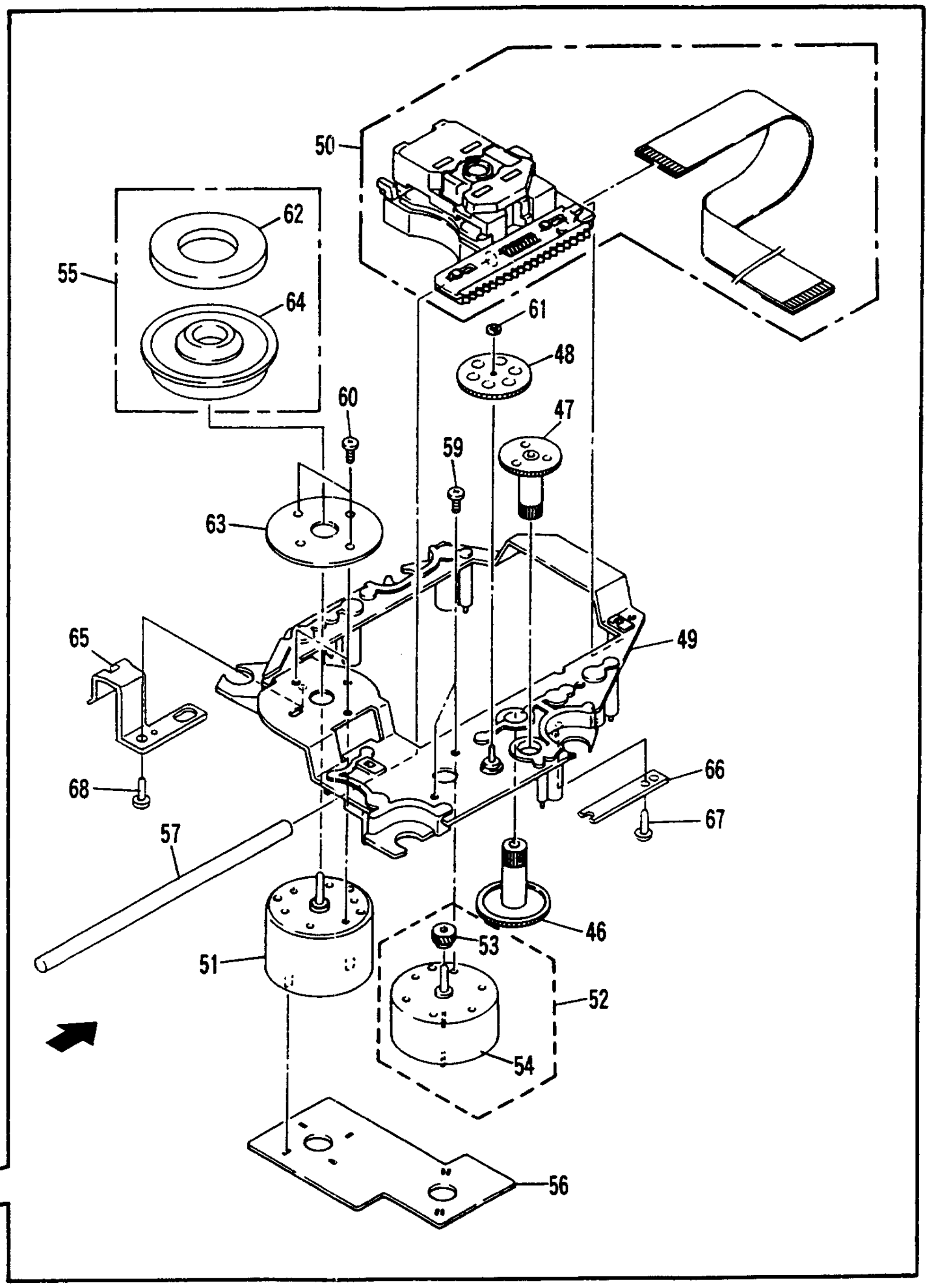
Mark	No.	Description	Parts No.
	1	CONTROL ASSY	AWZ8277
	2	DISPLAY ASSY	AWZ8284
NSP	3	HOOD SW ASSY	AWZ8290
	4	28P F.F.C/30V	ADD7021
	5	35P F.F.C/30V	ADD7023
	6	CONNECTOR 5P	RKP1682
	7	CONNECTOR 3P	RKP1683
	8	MECHANISM UNIT	RYM1248
	9	RUBBER SHEET	AEB7054
	10	GND HOLDER	ANG7072
	11	DOOR SPLING L	ABH7084
	12	DOOR SPLING R	ABH7085
	13	DOOR M SPRING	ABH7090
	14	RUBBER SHEET	AEB1111
	15	EJECT ARM (L)	AMR7074
	16	EJECT ARM (R)	AMR7075
	17	PCB MOLD	AMR7081
	18	DAMPER ASSY	AXA7021
	19	SCREW	BSZ20P120FMC
	20	EJECT SPRING (L)	ABH7102
	21	EJECT SPRING (R)	ABH7103
	22	SPRING	RBK1004
	23	COLLAR	RNK2135
	24	VOLUME KNOB	AAB7069
	25	MIC VOLUME KNOB	AAB7070
	26	EJECT BUTTON L	AAD7223
	27	EJECT BUTTON R	AAD7224
	28	CONTROL BUTTON A	AAD7237
	29	DS BUTTON	AAD7251
	30	MODE BUTTON	AAD7252
	31	P. BASS BUTTON	AAD7253
	32	CONTROL BUTTON B	AAD7254
	33	STA. LENS	AAK7210
	34	DOOR WINDOW L	AAK7211
	35	DOOR WINDOW R	AAK7267
	36	VOL. LENS	AAK7214
	37	DISPLAY LENS	AAK7217
	38	RC LENS	AAK7218
	39	HOOD M	AAN7100
	40	SCREW	BBZ30P080FZK
	41	SCREW	BPZ30P080FMC
	42	DOOR PANEL L	AAN7128
	43	DOOR PANEL R	AAN7129
	44	DOOR M	AAN7115
	45	FRONT PANEL	AMB7319
	46	BLIND MOLD L	AMR7100
	47	BLIND MOLD R	AMR7101

2.3 GM MECHA ASSY

Mark	No.	Description	Parts No.
NSP	1	MECHA PCB ASSY	AWZ7835
NSP	2	SENSOR PCB ASSY	AWZ7836
NSP	3	MOTOR PCB ASSY	AWZ7837
NSP	4	SW PCB ASSY	AWZ7838
	5	ARM A SPRING	ABH7050
	6	GEAR PLATE SPRING	ABH7051
	7	CLAMP SPRING	ABH7107
	8	LOCK LEVER SPRING	ABH7120
	9	....	
	10	LOADING BELT	AEB7029
	11	BELT	AEB7030
NSP	12	LOCK ANGLE	ANB7027
NSP	13	LOCK LEVER P	ANB7042
NSP	14	SERVO STOPPER S	ANB7047
	15	LOADING BASE	ANW7051
	16	CAM COVER	ANW7052
	17	MOTOR HOLDER	ANW7053
	18	SENSOR HOLDER	ANW7054
	19	FLOAT BASE	ANW7055
	20	CLAMPER HOLDER	ANW7084
	21	ARM (A)	ANW7057
	22	ARM (B)	ANW7058
	23	DRIVE PLATE	ANW7059
	24	ARM PLATE	ANW7060
	25	GEAR PLATE	ANW7082
	26	GEAR PULLEY (B)	ANW7062
	27	GEAR A	ANW7063
	28	DRIVE GEAR	ANW7064
	29	BEARING	ANW7065
	30	GEAR PULLEY A	ANW7066
	31	SELECT GEAR	ANW7067
	32	ROLLER	ANW7068
	33	LED LENS	ANW7072
	34	ROLLER B	ANW7075
	35	MOTOR PULLEY	PNW1634
	36	CLAMPER	ANW7085
	37	FLOAT SPRING	ABH7049
	38	CONNECTOR ASSY (4P)	ADE7006
	39	FLOAT RUBBER	AEB7059
NSP	40	SERVO MECHANISM ASSY GM	AXA7028
	41	SCREW	IPZ20P080FMC
	42	MOTOR ASSY (SELECT)	AEA7005
NSP	43	MOTOR	PXM1002
	44	MOTOR ASSY	AEA7006
	45	LOADING MOTOR	VXM1034
	46	GEAR 1	PNW2052
	47	GEAR 2	PNW2053
	48	GEAR 3	PNW2054
	49	CARRIAGE BASE	PNW2445
	50	PICKUP ASSY	AEA7004
	51	D.C. MOTOR ASSY (SPINDLE)	PEA1235
	52	CARRIAGE DC MOTOR ASSY	PEA1246
	53	PINION GEAR	PNW2055
NSP	54	CARRIAGE DC MOTOR/0.3W	PXM1027
	55	DISC TABLE ASSY	PEA1314
NSP	56	MECHANISM BOARD ASSY	PWX1192
	57	GUIDE BAR	PLA1094
	58	....	
	59	SCREW	JFZ17P025FZK
	60	SCREW	JFZ20P040FMC
	61	WASHER	WT12D032D025
	62	CLAMP MAGNET	PMF1014
	63	YOKE M	PNB1312
NSP	64	DISC TABLE	PNW2410
NSP	65	FLOAT ANGLE	ANB7020
	66	GEAR STOPPER	PNB1303
	67	SCREW	BPZ20P060FMC
	68	SCREW	BPZ26P100FMC
	69	....	
		FROIL (for service)	GYA1001
		HA NARL (for service)	GEM1016

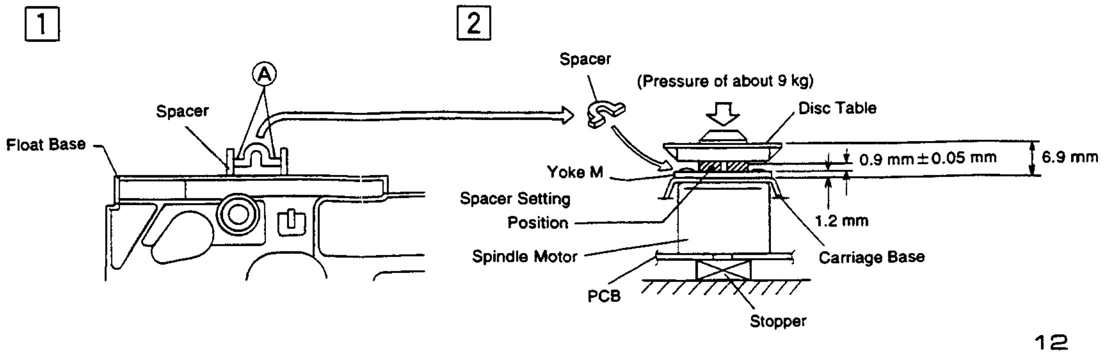

36
20
18
34
2
Ⓑ
21
22
5
23
24
7
14
15
Ⓐ38
(2/2)
Ⓓ
1
41
29
41
41
8
Ⓒ
33
13
31
29
41
28
27
42
Ⓑ
3
43
35
32
30
27
26
41
41
6
Ⓐ
Ⓒ
35
45
17
44
25
11
10
38
(1/2)
40
12
6
41
16
4
41
Ⓓ
37
39
39
39
39
19

Servo Mechanism Assy GM


50
62
55
64
61
48
60
47
59
63
65
49
68
66
67
57
51
53
46
52
54
56

● How to install the disc table

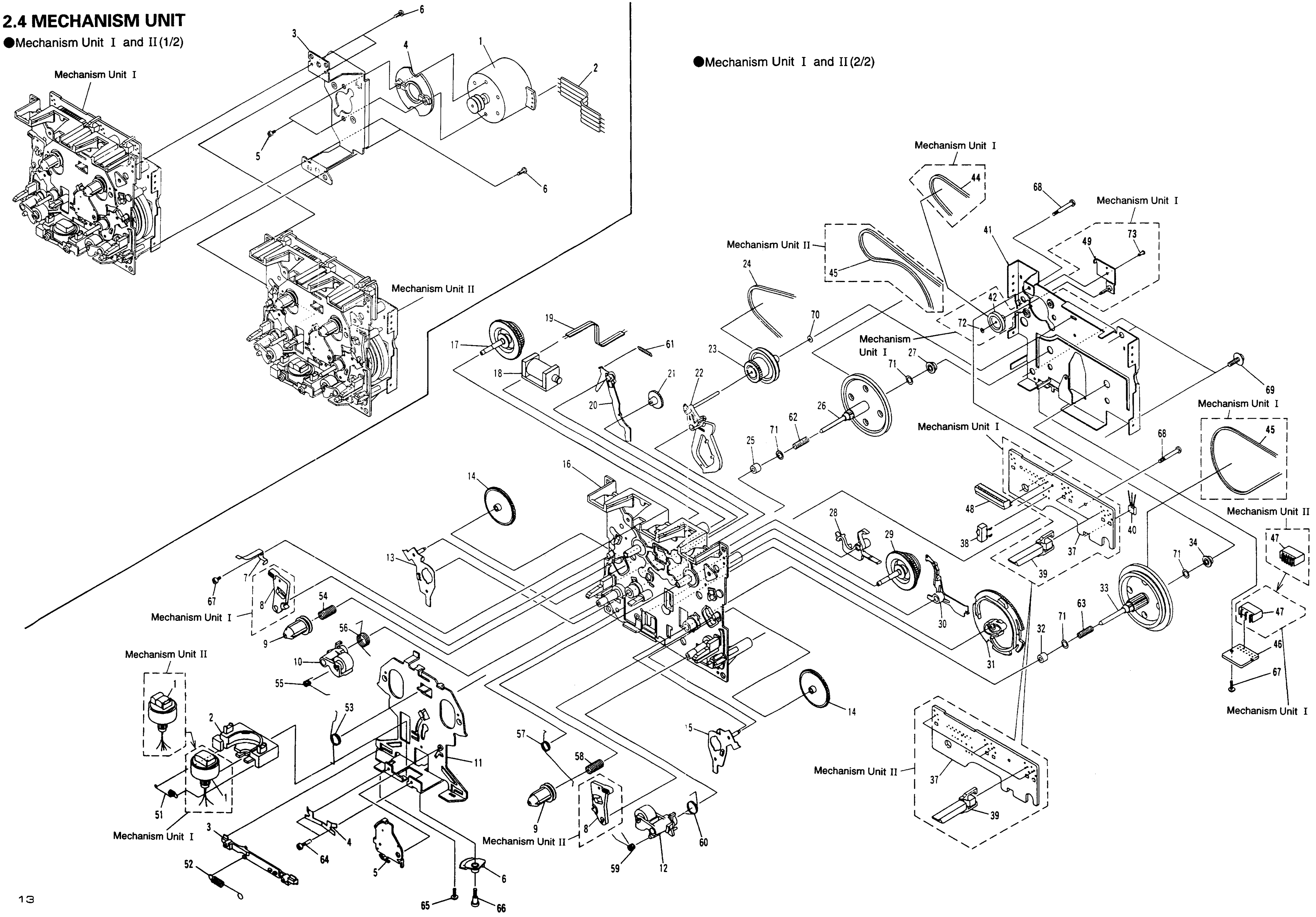
1. Use nipper or other tool to cut the two sections marked Ⓐ figure 1.
   Then remove the spacer.
2. While supporting the spindle motor shaft with the stopper, put spacer on top of the yoke M, and stick the disc table on top (takes about 9kg pressure). Take off the spacer.


1
2
Ⓐ
Spacer
Float Base
Spacer
(Pressure of about 9 kg)
Disc Table
Yoke M
0.9 mm±0.05 mm
6.9 mm
Spacer Setting Position
1.2 mm
Spindle Motor
Carriage Base
PCB
Stopper

2.4 MECHANISM UNIT

●Mechanism Unit I and II (1/2)

●Mechanism Unit I and II (2/2)


Mechanism Unit I
Mechanism Unit II
1
2
3
4
5
6
6
Mechanism Unit I
44
68
Mechanism Unit I
73
49
41
Mechanism Unit II
45
24
42
72
70
Mechanism Unit I
27
71
23
19
17
61
18
21
22
20
26
62
71
25
69
Mechanism Unit I
45
Mechanism Unit I
68
16
14
48
40
38
37
39
28
29
30
31
Mechanism Unit II
47
34
71
33
63
71
32
47
46
67
Mechanism Unit I
13
7
67
8
Mechanism Unit I
54
9
56
10
55
Mechanism Unit II
1
2
53
11
51
1
Mechanism Unit I
3
52
4
64
5
65
6
66
57
58
9
8
Mechanism Unit II
59
12
60
15
14
Mechanism Unit II
37
39

■ Mechanism unit I and II (1/2)

Mark	No.	Description	Parts No.
	1	ASSY MOTOR	RXM1080
NSP	2	JUMPER WIRE	RDD1012
	3	BRACKET MOTOR	RNE1830
	4	SPACER	RNK1822
	5	SCREW	RBA1100
	6	SCREW	PCZ20P040FMC

■ Mechanism unit I and II (2/2)

Mark	No.	Description	Parts No.
	1	ASSY HOLDER HEAD (*1)	RXA1400
	1	ASSY HOLDER HEAD (*2)	RXA1664
	2	FRAME HEAD	RNK1715
	3	LEVER HEAD	RNK1716
	4	SPRING AZIMUTH	RBK1006
	5	ASSY ARM ASSIST	RXA1401
	6	GEAR ARM HEAD	RNK1717
	7	SPRING CASSETTE	RBK1039
	8	EJECT LOCK	RNK1718
	9	CAP REEL	RNK1719
	10	ASSY PINCH ARM L	RXA1403
	11	CHASSIS HEAD	RNE1437
	12	ASSY PINCH ARM R	RXA1404
	13	ARM PLAY L	RNK1866
	14	GEAR PLAY	RNK1867
	15	ARM PLAY R	RNK1868
	16	CHASSIS OS	RXA1411
	17	ASSY SUB REEL L	RXA1407
	18	SOLENOID	RXP1020
	19	WIRE	RDC1006
	20	ARM RVS	RNK1721
	21	GEAR FF	RNK1723
	22	ASSY ARM FR	RXA1412
	23	ASSY PULLEY FR	RXA1413
	24	BELT FR	REB1292
	25	METAL	RNG1048
	26	ASSY FLYWHEEL L	RXA1690
	27	METAL	RNG1005
	28	ARM BRAKE	RNK1724
	29	ASSY SUB REEL R	RXA1408
	30	ARM TRIGER	RNK1722
	31	GEAR CAM	RNK1725
	32	METAL	RNG1049
	33	ASSY FLYWHEEL R	RXA1691
	34	METAL	RNG1004
	35	....	
	36	....	
	37	P. C. BOARD	RNP1610
	38	SWITCH MODE	RSN1020
	39	SWITCH (LEAF)	RSN1019
	40	HALL IC	DN6851A
	41	BRACKET FW (*1)	RNE1854
	41	BRACKET FW (*2)	RNE1438
	42	PULLEY (*1 only)	RNK2132
	43	....	
	44	BELT FW (*1 only)	REB1291
	45	BELT MAIN (* 1)	REB1290
	45	BELT MAIN (* 2)	REB1289
	46	P. C. BOARD	RNP1348
	47	HOUSING (*1)	RKP1396
	47	HOUSING (*2)	RKP1397
	48	CONNECTOR (*1)	RKP1713
	48	CONNECTOR (*2)	RKP1714
	49	ASSY HOLDER (*1 only)	RXA1689
	50	....	
	51	SPRING	RBH1282
	52	SPRING	RBH1283
	53	SPRING	RBH1284
	54	SPRING	RBH1286
	55	SPRING	RBH1288
	56	SPRING	RBH1291
	57	SPRING	RBH1285
	58	SPRING	RBH1287
	59	SPRING	RBH1289
	60	SPRING	RBH1290
	61	SPRING	RBH1292
	62	FWP SP (SPRING)	RBH1061
	63	SPRING	RBH1325
	64	SCREW (For AZIMUTH)	RBA1023
	65	SCREW	RBA1027
	66	SCREW	RBA1030
	67	SCREW	PCZ20P040FMC
	68	SCREW	RBA1093
	69	SCREW	RBA1094
	70	WASHER	RBF1046
	71	WASHER	WA26D047D013
	72	WASHER (*1 only)	WT13D030D025
	73	SCREW (*1 only)	RBA1118

*Note) *1: Mechanism Unit I*
**2: Mechanism Unit II*

2.5 PACKING

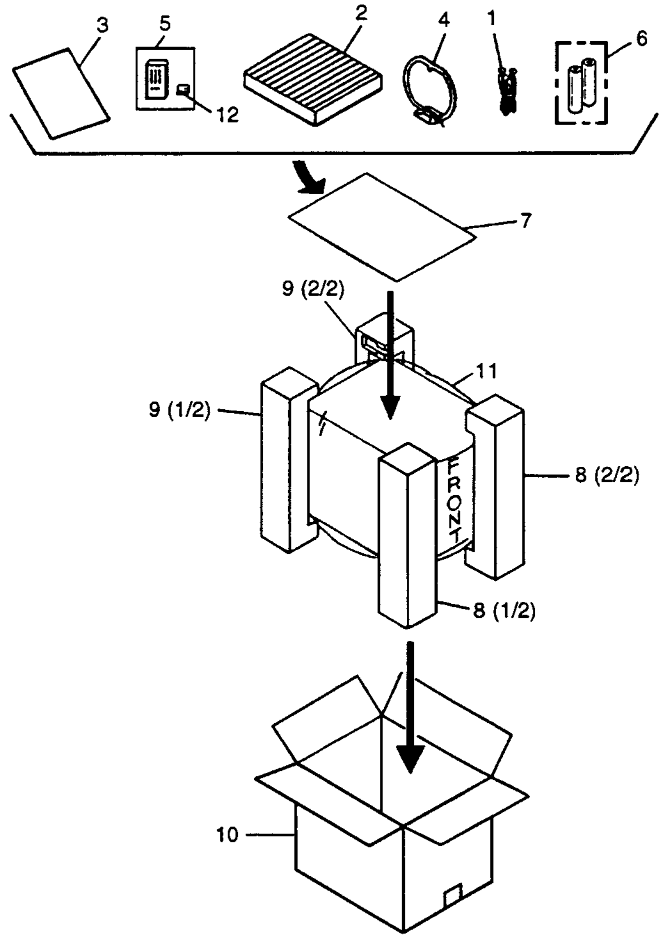
■ Contrast of XR-P260F/KUXJ, KCXJ, DDXJ, DDXJ/NC, DLXJ/NC and YPWXJ

XR-P260F/KUXJ, KCXJ, DDXJ, DDXJ/NC, DLXJ/NC and YPWXJ have the same construction except for the following:

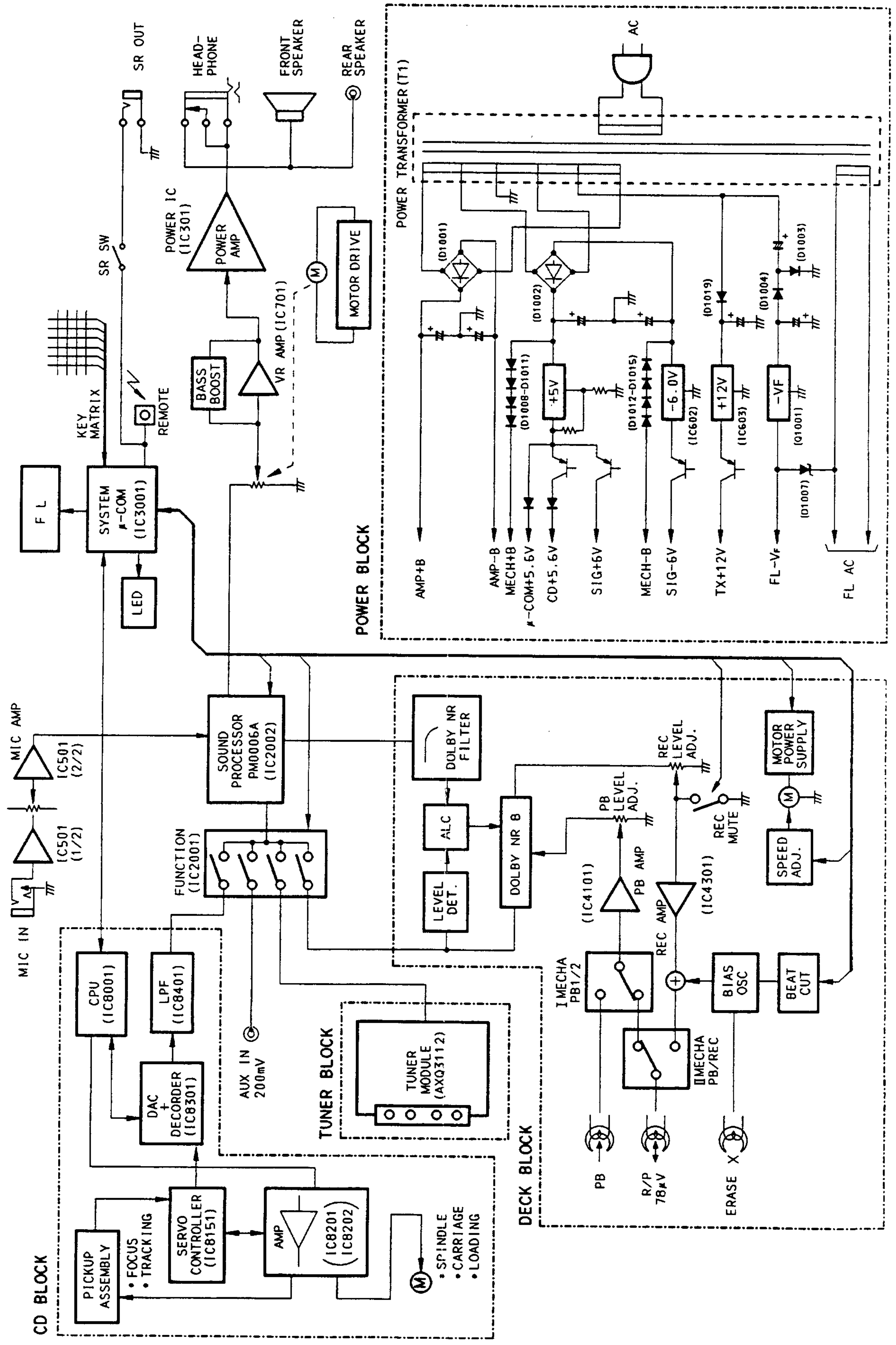
Mark	No.	Description	Part No.						Remarks
			KUXJ type	KCXJ type	DDXJ type	DDXJ/NC type	DLXJ/NC type	YPWXJ type	
	3	Operating Instructions (French)	Not used	ARC7086	Not used	Not used	Not used	Not used	
	3	Operating Instructions (English/Spanish/Chinese)	Not used	Not used	ARE7055	ARE7055	ARE7055	Not used	
	3	Operating Instructions (English)	ARB7056	ARB7056	Not used	Not used	Not used	ARB7056	
NSP	7	Polyethylene Bag	AHG7030	AHG7032	AHG7032	AHG7032	AHG7032	AHG7032	
	10	Packing Case	AHD7233	AHD7233	AHD7234	AHD7235	AHD7235	AHH7236	

■ Parts List for XR-P260F/KUXJ

Mark	No.	Description	Parts No.
	1	FM ANTENNA	ADH1017
	2	CD CASE RACK	AMR7072
	3	OPERATING INSTRUCTIONS (English)	ARB7056
	4	LOOP ANTENNA	ATB7004
	5	REMOTE CONTROL UNIT (CU-XR021)	AXD7077
NSP	6	BATTERY (R6P, AA)	VEM-013
NSP	7	POLYETHYLENE BAG	AHG7030
	8	FRONT PAD LR	AHA7098
	9	REAR PAD LR	AHA7099
	10	PACKING CASE	AHD7233
	11	PACKING SHEET	AHG7003
	12	BATTERY COVER	AZA7123



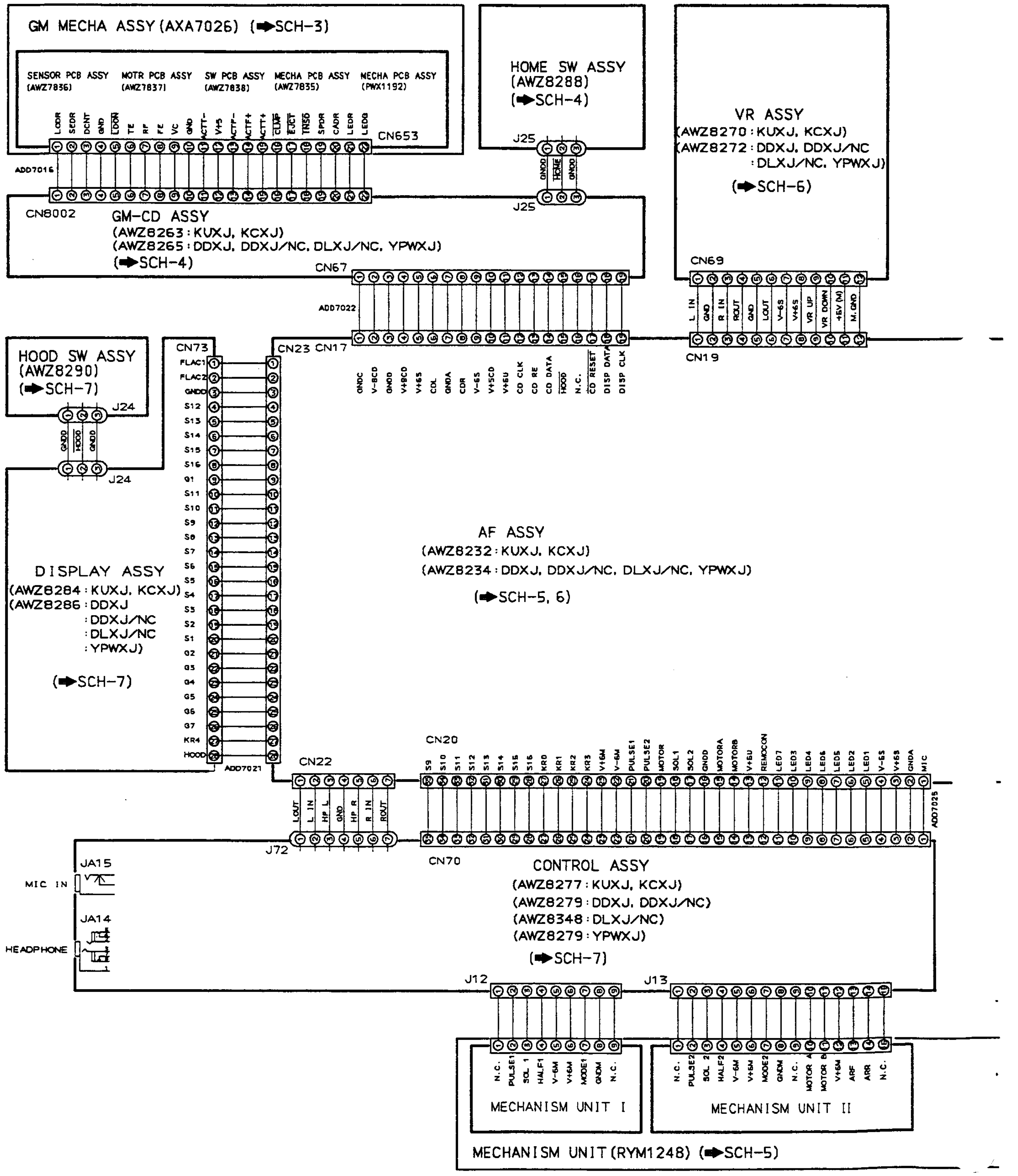
3. BLOCK DIAGRAM


SR OUT
HEAD-PHONE
FRONT SPEAKER
REAR SPEAKER
AC
POWER TRANSFORMER (T1)
SR SW
POWER IC (IC301)
POWER AMP
MOTOR DRIVE
VR AMP (IC701)
BASS BOOST
KEY MATRIX
REMOTE
FL
SYSTEM µ-COM (IC3001)
LED
(D1001)
(D1002)
(D1008~D1011)
(D1012~D1015)
(D1019)
(D1004)
(D1003)
(D1007)
+5V
-6.0V
(IC602)
+12V
(IC603)
-VF
(Q1001)
AMP+B
AMP-B
MECH+B
µ-COM+5.6V
CD+5.6V
SIG+6V
MECH-B
SIG-6V
TX+12V
FL-Vf
FL AC
POWER BLOCK
MIC AMP
IC501 (2/2)
IC501 (1/2)
MIC IN
SOUND PROCESSOR PM0006A (IC2002)
FUNCTION (IC2001)
DOLBY NR FILTER
ALC
LEVEL DET.
DOLBY NR B
REC LEVEL ADJ.
PB LEVEL ADJ.
PB AMP
(IC4101)
REC AMP
(IC4301)
REC MUTE
MOTOR POWER SUPPLY
SPEED ADJ.
I MECHA PB1/2
II MECHA PB/REC
BIAS OSC
BEAT CUT
PB
R/P 78µV
ERASE
DECK BLOCK
CPU (IC8001)
LPF (IC8401)
DAC + DECORDER (IC8301)
AUX IN 200mV
TUNER BLOCK
TUNER MODULE (AXQ3112)
PICKUP ASSEMBLY
• FOCUS
• TRACKING
SERVO CONTROLLER (IC8151)
AMP
(IC8201) (IC8202)
• SPINDLE
• CARRIAGE
• LOADING
CD BLOCK

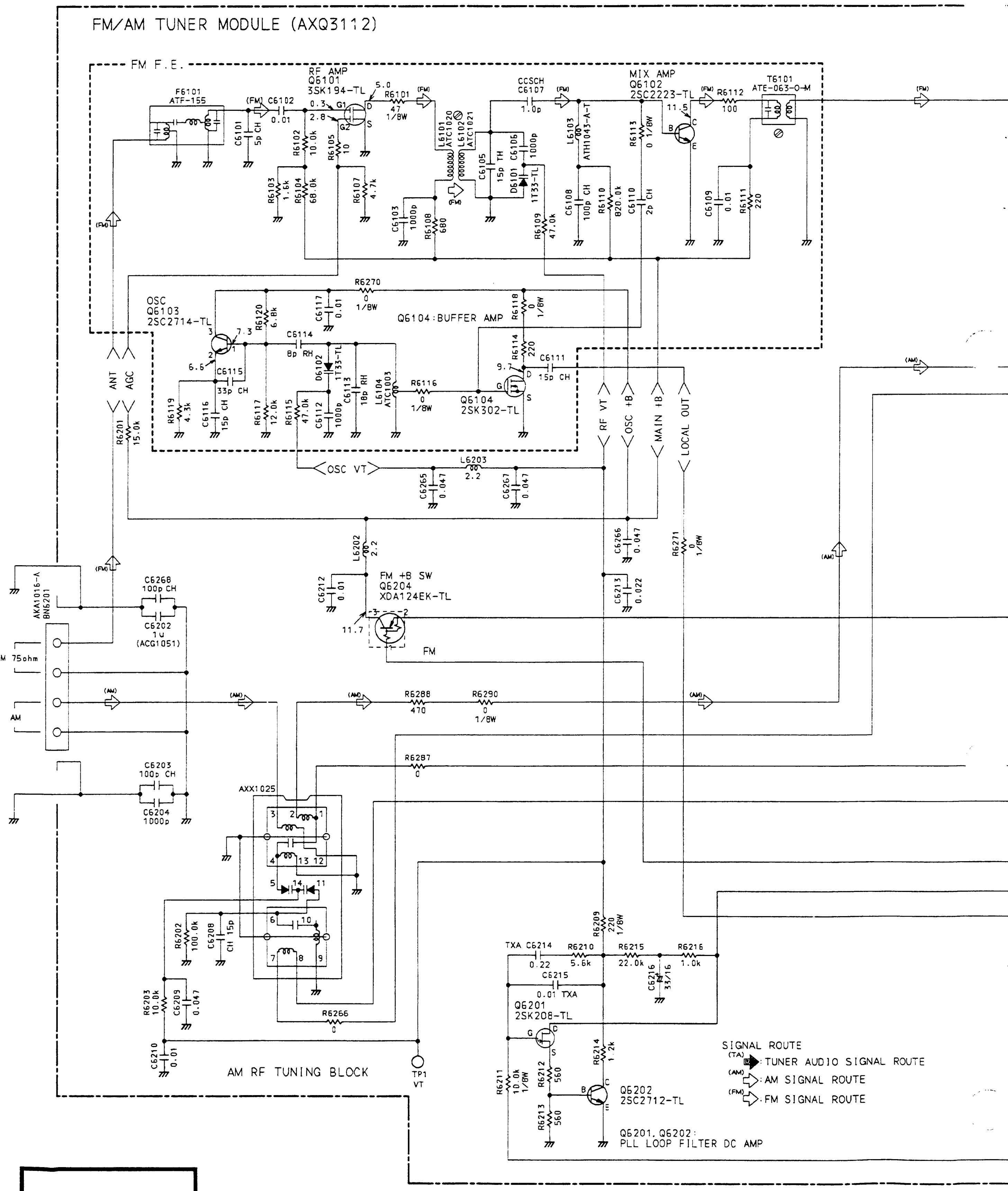
---

4. SCHEMATIC AND PCB CONNECTION DIAGRAMS

4.1 OVERALL SCHEMATIC DIAGRAM

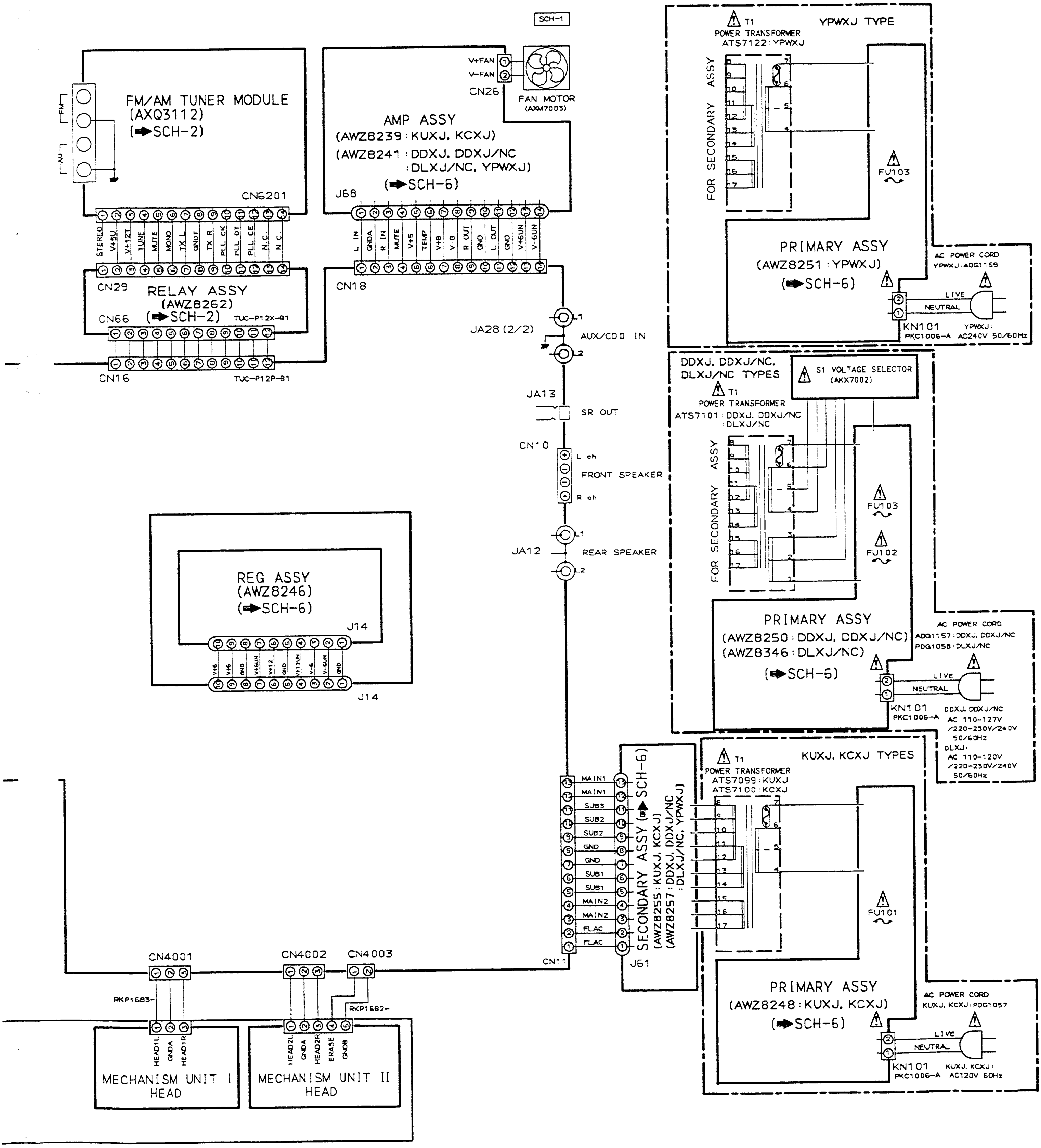

GM MECHA ASSY (AXA7026) (➡SCH-3)
SENSOR PCB ASSY (AWZ7836)
MOTR PCB ASSY (AWZ7837)
SW PCB ASSY (AWZ7838)
MECHA PCB ASSY (AWZ7835)
MECHA PCB ASSY (PWX1192)
CN653
ADD7016
CN8002
GM-CD ASSY
(AWZ8263 : KUXJ, KCXJ)
(AWZ8265 : DDXJ, DDXJ/NC, DLXJ/NC, YPWXJ)
(➡SCH-4)
CN67
ADD7022
HOME SW ASSY
(AWZ8288)
(➡SCH-4)
J25
VR ASSY
(AWZ8270 : KUXJ, KCXJ)
(AWZ8272 : DDXJ, DDXJ/NC : DLXJ/NC, YPWXJ)
(➡SCH-6)
CN69
CN19
HOOD SW ASSY
(AWZ8290)
(➡SCH-7)
J24
CN73
CN23 CN17
DISPLAY ASSY
(AWZ8284 : KUXJ, KCXJ)
(AWZ8286 : DDXJ : DDXJ/NC : DLXJ/NC : YPWXJ)
(➡SCH-7)
AF ASSY
(AWZ8232 : KUXJ, KCXJ)
(AWZ8234 : DDXJ, DDXJ/NC, DLXJ/NC, YPWXJ)
(➡SCH-5, 6)
ADD7021
CN22
CN20
ADD7025
J72
CN70
JA15
MIC IN
JA14
HEADPHONE
CONTROL ASSY
(AWZ8277 : KUXJ, KCXJ)
(AWZ8279 : DDXJ, DDXJ/NC)
(AWZ8348 : DLXJ/NC)
(AWZ8279 : YPWXJ)
(➡SCH-7)
J12
J13
MECHANISM UNIT I
MECHANISM UNIT II
MECHANISM UNIT (RYM1248) (➡SCH-5)

4.2 FM/AM TUNER MODULE


FM/AM TUNER MODULE (AXQ3112)
FM F.E.
F6101
ATF-155
RF AMP
Q6101
3SK194-TL
R6101
47
1/8W
C6102
0.01
C6101
5p CH
R6102
10.0k
R6103
1.6k
R6104
68.0k
R6105
10
R6107
4.7k
L6101
ATC1020
L6102
ATC1021
C6103
1000p
R6108
680
C6105
15p TH
C6106
1000p
D6101
1T33-TL
CCSCH
C6107
1.0p
L6103
ATH1043-A-T
C6108
100p CH
R6109
47.0k
R6110
820.0k
MIX AMP
Q6102
2SC2223-TL
R6113
0 1/8W
C6110
2p CH
R6112
100
T6101
ATE-063-O-M
C6109
0.01
R6111
220
OSC
Q6103
2SC2714-TL
R6120
6.8k
C6117
0.01
R6270
0
1/8W
Q6104:BUFFER AMP
R6118
0
1/8W
R6114
220
C6111
15p CH
C6114
8p RH
D6102
1T33-TL
C6113
18p RH
L6104
ATC1003
R6116
0
1/8W
Q6104
2SK302-TL
C6115
33p CH
R6119
4.3k
C6116
15p CH
R6117
12.0k
R6115
47.0k
C6112
1000p
ANT
AGC
RF VT
OSC +B
MAIN +B
LOCAL OUT
R6201
15.0k
OSC VT
L6203
2.2
C6265
0.047
C6267
0.047
L6202
2.2
C6266
0.047
R6271
0
1/8W
C6212
0.01
FM +B SW
Q6204
XDA124EK-TL
11.7
FM
C6213
0.022
AKA1016-A
BN6201
C6268
100p CH
C6202
1u
(ACG1051)
FM 75ohm
AM
R6288
470
R6290
0
1/8W
R6287
0
C6203
100p CH
C6204
1000p
AXX1025
R6202
100.0k
C6208
CH 15p
R6203
10.0k
C6209
0.047
R6266
0
C6210
0.01
AM RF TUNING BLOCK
TP1
VT
R6209
220
1/8W
TXA C6214
0.22
R6210
5.6k
R6215
22.0k
R6216
1.0k
C6216
33/16
C6215
0.01 TXA
Q6201
2SK208-TL
R6214
1.2k
R6211
10.0k
1/8W
R6212
560
R6213
560
Q6202
2SC2712-TL
Q6201, Q6202:
PLL LOOP FILTER DC AMP
SIGNAL ROUTE
(TA): TUNER AUDIO SIGNAL ROUTE
(AM): AM SIGNAL ROUTE
(FM): FM SIGNAL ROUTE

SCH-2

FM/AM TUNER MODULE


SCH-1
FM/AM TUNER MODULE
(AXQ3112)
(➡SCH-2)
FM
AM
CN6201
STEREO
V+5U
V+12T
TUNE
MUTE
MONO
TX L
GNDT
TX R
PLL CK
PLL DT
PLL CE
N.C.
N.C.
CN29
RELAY ASSY
(AWZ8262)
(➡SCH-2)
CN66
TUC-P12X-B1
CN16
TUC-P12P-B1
V+FAN
V-FAN
CN26
FAN MOTOR
(AXM7003)
AMP ASSY
(AWZ8239 : KUXJ, KCXJ)
(AWZ8241 : DDXJ, DDXJ/NC
:DLXJ/NC, YPWXJ)
(➡SCH-6)
J68
L IN
GNDA
R IN
MUTE
V+5
TEMP
V+B
V-B
R OUT
GND
L OUT
GND
V+6UN
V-6UN
CN18
JA28 (2/2)
AUX/CD II IN
JA13
SR OUT
CN10
L ch
FRONT SPEAKER
R ch
JA12
REAR SPEAKER
REG ASSY
(AWZ8246)
(➡SCH-6)
J14
V+6
V+6
GND
V+6UN
V+12
GND
V+12UN
V-6
V-6UN
GND
J14
MAIN1
MAIN1
SUB3
SUB2
SUB2
GND
GND
SUB1
SUB1
MAIN2
MAIN2
FLAC
FLAC
CN11
J61
SECONDARY ASSY (➡SCH-6)
(AWZ8255 : KUXJ, KCXJ)
(AWZ8257 : DDXJ, DDXJ/NC
: DLXJ/NC, YPWXJ)
CN4001
CN4002
CN4003
RKP1683-
RKP1682-
HEAD1L
GNDA
HEAD1R
HEAD2L
GNDA
HEAD2R
ERASE
GNDB
MECHANISM UNIT I
HEAD
MECHANISM UNIT II
HEAD
T1
POWER TRANSFORMER
ATS7122 : YPWXJ
YPWXJ TYPE
FOR SECONDARY ASSY
FU103
PRIMARY ASSY
(AWZ8251 : YPWXJ)
(➡SCH-6)
AC POWER CORD
YPWXJ : ADG1159
LIVE
NEUTRAL
KN101
PKC1006-A
YPWXJ :
AC240V 50/60Hz
DDXJ, DDXJ/NC,
DLXJ/NC TYPES
S1 VOLTAGE SELECTOR
(AKX7002)
T1
POWER TRANSFORMER
ATS7101 : DDXJ, DDXJ/NC
: DLXJ/NC
FOR SECONDARY ASSY
FU103
FU102
PRIMARY ASSY
(AWZ8250 : DDXJ, DDXJ/NC)
(AWZ8346 : DLXJ/NC)
(➡SCH-6)
AC POWER CORD
ADG1157 : DDXJ, DDXJ/NC
PDG1058 : DLXJ/NC
LIVE
NEUTRAL
KN101
PKC1006-A
DDXJ, DDXJ/NC :
AC 110-127V
/220-250V/240V
50/60Hz
DLXJ :
AC 110-120V
/220-230V/240V
50/60Hz
T1
POWER TRANSFORMER
ATS7099 : KUXJ
ATS7100 : KCXJ
KUXJ, KCXJ TYPES
FU101
PRIMARY ASSY
(AWZ8248 : KUXJ, KCXJ)
(➡SCH-6)
AC POWER CORD
KUXJ, KCXJ : PDG1057
LIVE
NEUTRAL
KN101
PKC1006-A
KUXJ, KCXJ :
AC120V 60Hz

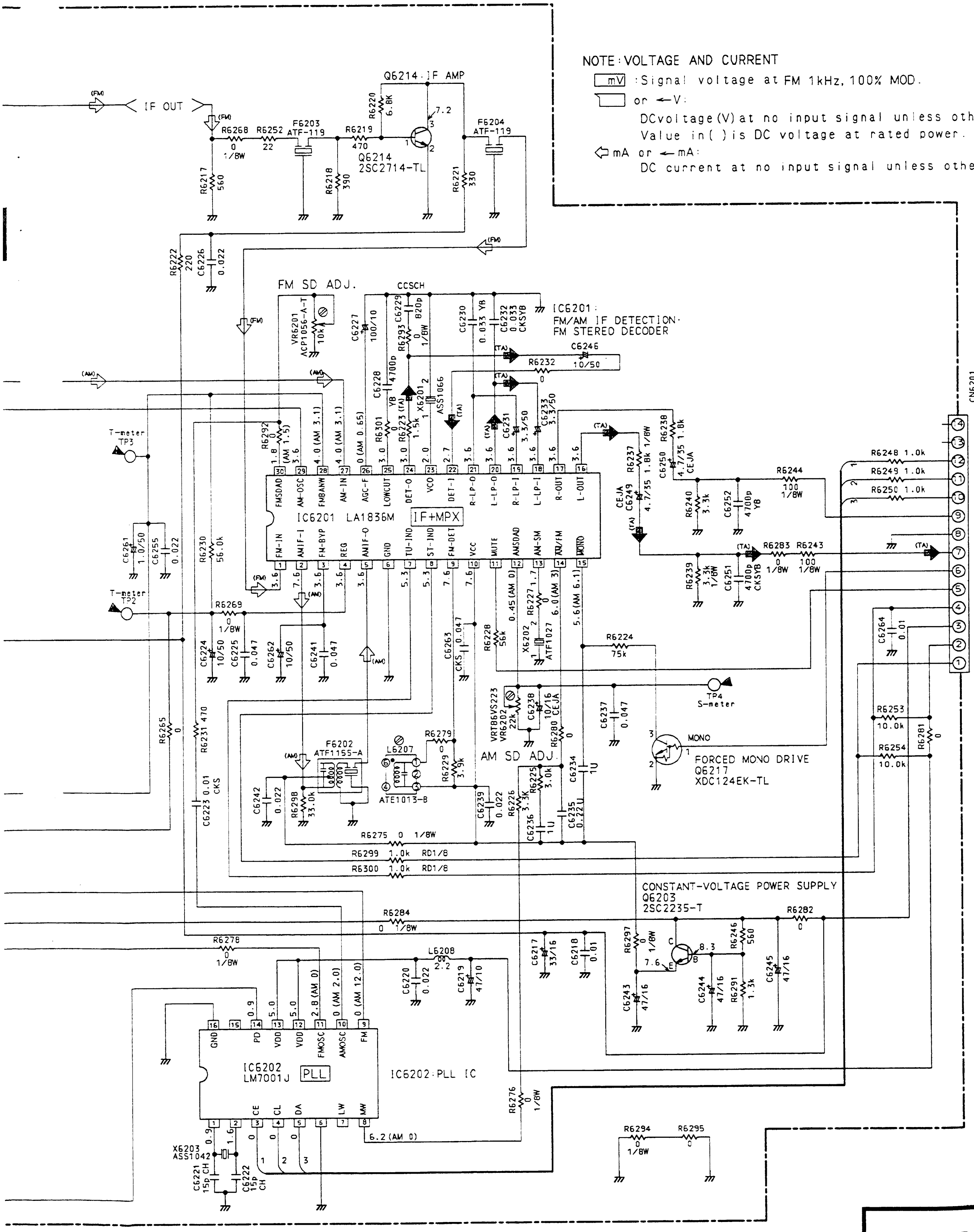
SCH-2

NOTE: VOLTAGE AND CURRENT

mV : Signal voltage at FM 1kHz, 100% MOD.

or ←V:
DCvoltage(V) at no input signal unless otherwise noted.
Value in ( ) is DC voltage at rated power.

⇦mA or ←mA:
DC current at no input signal unless otherwise noted.

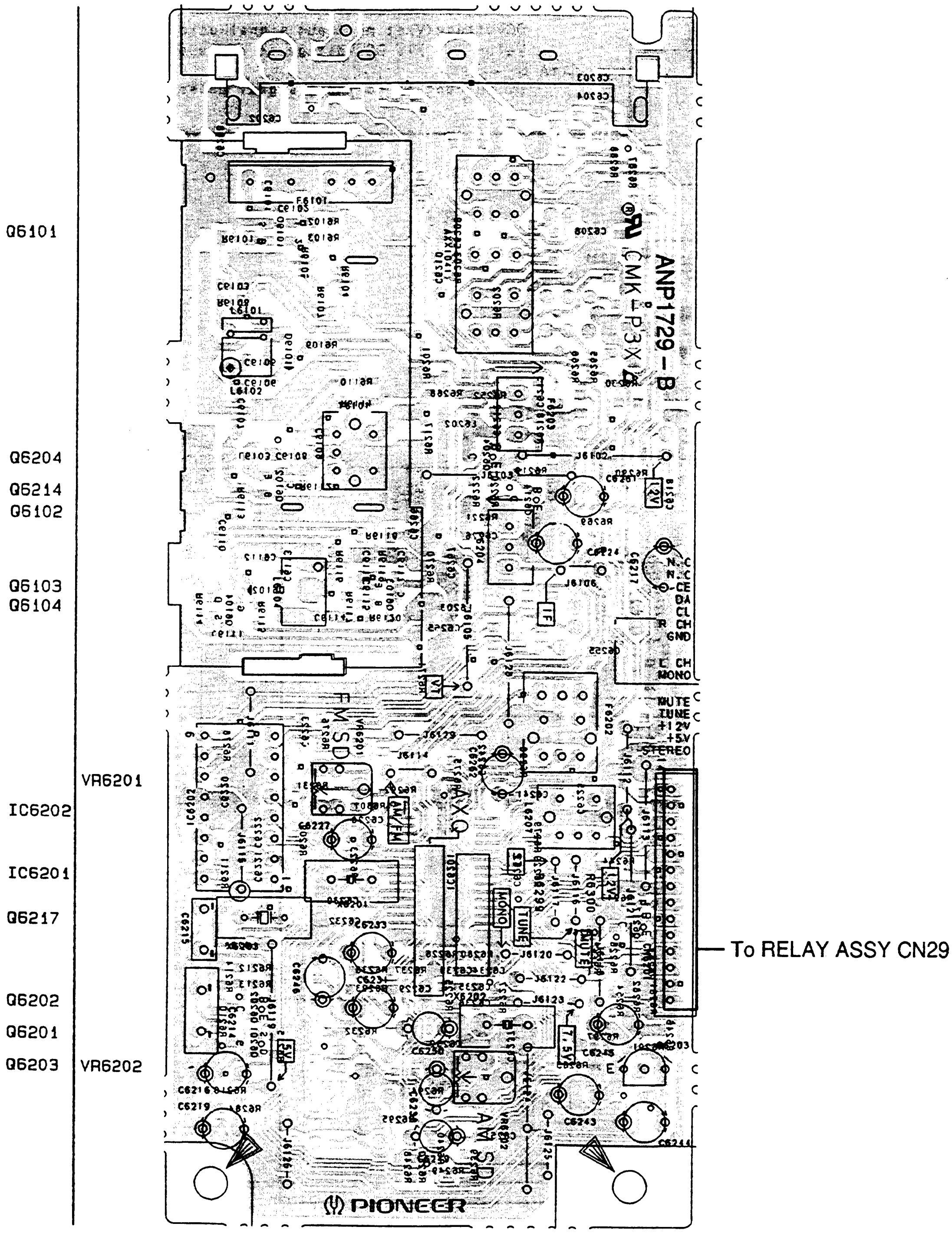


IF OUT
Q6214:IF AMP
Q6214 2SC2714-TL
R6268 0 1/8W
R6252 22
F6203 ATF-119
R6219 470
R6220 6.8K
R6217 560
R6218 390
R6221 330
F6204 ATF-119
R6222 220
C6226 0.022
FM SD ADJ.
VR6201 ACP1056-A-T 10k
CCSCH
C6227 100/10
C6229 820p
R6293 0 1/8W
C6230 0.033 YB
C6232 0.033 CKSYB
IC6201: FM/AM IF DETECTION· FM STEREO DECODER
C6246 10/50
R6232 0
C6228 4700p YB
X6201 ASS1066
R6301 0
R6223 1.5k
C6231 3.3/50
C6233 3.3/50
R6292 0
T-meter TP3
T-meter TP2
IC6201 LA1836M
IF+MPX
FMSDAD
AM-OSC
FMBANW
AM-IN
AGC-F
LOWCUT
DET-O
VCO
DET-I
R-LP-O
L-LP-O
R-LP-I
L-LP-I
R-OUT
L-OUT
FM-IN
AMIF-I
FM-BYP
REG
AMIF-O
GND
TU-IND
ST-IND
FM-DET
VCC
MUTE
AMSDAD
AM-SM
AM/FM
MONO
C6261 1.0/50
C6255 0.022
R6230 56.0k
R6269 0 1/8W
C6224 10/50
C6225 0.047
C6262 10/50
C6241 0.047
C6263 0.047 CKS
R6228 56k
X6202 ATF1027
R6227 0
R6237 1.8k 1/8W
R6238 1.8k
C6249 4.7/35 CEJA
C6250 4.7/35 CEJA
R6240 3.3k
C6252 4700p YB
R6239 3.3k 1/8W
C6251 4700p CKSYB
R6283 0 1/8W
R6243 100 1/8W
R6244 100 1/8W
R6248 1.0k
R6249 1.0k
R6250 1.0k
CN6201 KP2001A14L
N.C.
N.C.
CE
DA
CL
R CH
GND
L CH
MONO
MUTE
TUNE
+12V
+5V
STEREO
To RELAY ASSY CN29 (SCH-6)
C6264 0.01
R6224 75k
TP4 S-meter
VR6202 VRTB6VS223 22k
C6238 10/16 CEJA
R6280 0
C6237 0.047
MONO
FORCED MONO DRIVE
Q6217 XDC124EK-TL
R6253 10.0k
R6254 10.0k
R6281 0
R6265 0
R6231 470
C6223 0.01 CKS
F6202 ATF1155-A
C6242 0.022
R6298 33.0k
L6207 ATE1013-B
R6279 0
R6229 3.9k
AM SD ADJ.
C6239 0.022
R6225 3.0k
R6226 3.3k
C6236 1U
C6234 1U
C6235 0.22U
R6275 0 1/8W
R6299 1.0k RD1/8
R6300 1.0k RD1/8
CONSTANT-VOLTAGE POWER SUPPLY
Q6203 2SC2235-T
R6284 0 1/8W
R6282 0
R6278 0 1/8W
L6208 2.2
C6220 0.022
C6219 47/10
C6217 33/16
C6218 0.01
R6297 0 1/8W
R6246 560
C6243 47/16
C6244 47/16
R6291 1.3k
C6245 47/16
IC6202 LM7001J
PLL
IC6202:PLL IC
GND
PD
VDD
FMOSC
AMOSC
FM
CE
CL
DA
LW
MW
R6276 0 1/8W
6.2 (AM 0)
X6203 ASS1042
C6221 15p CH
C6222 15p CH
R6294 0 1/8W
R6295 0

FM/AM TUNER MODULE

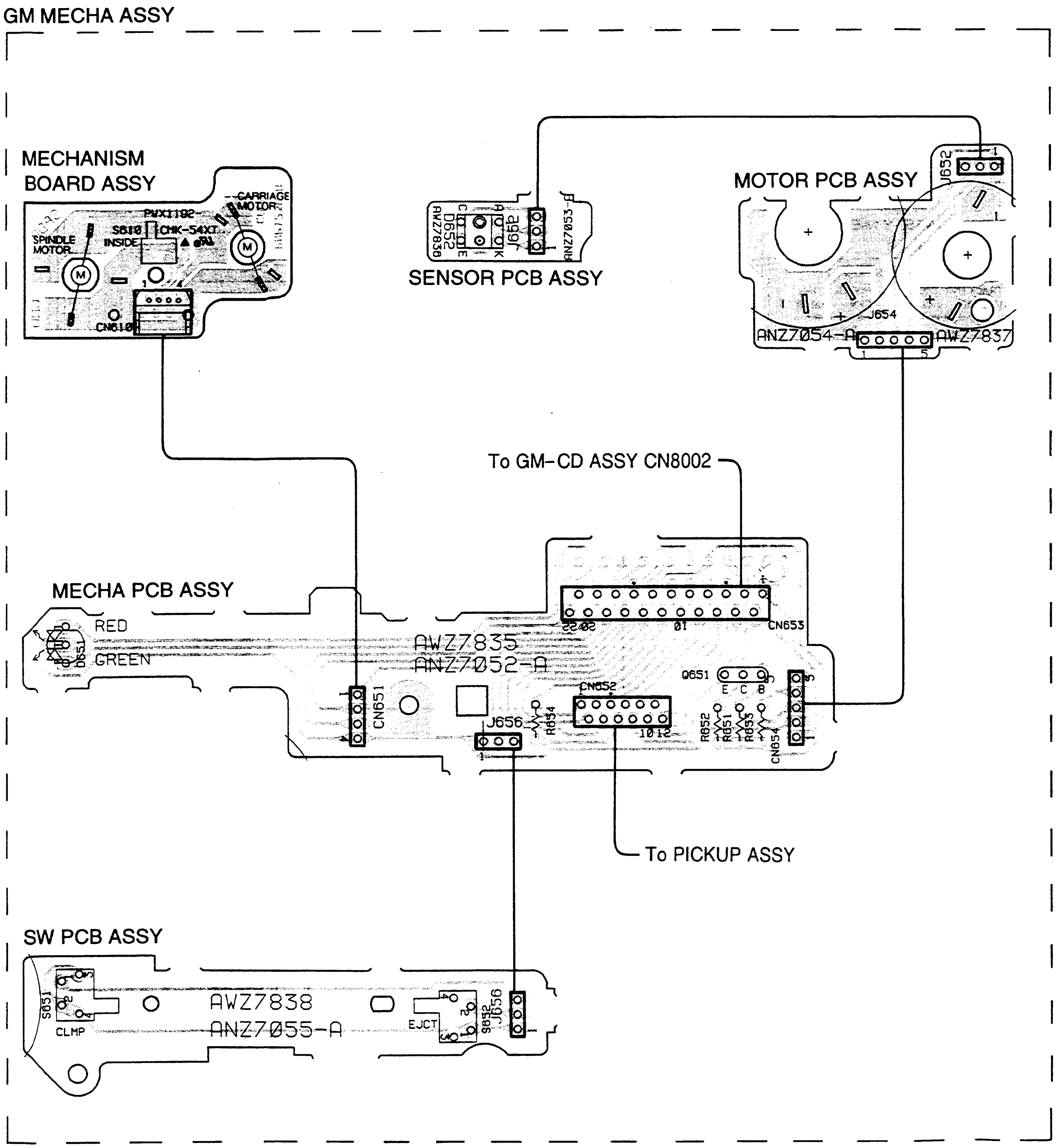
SCH-2

FM/AM TUNER MODULE


Q6101
Q6204
Q6214
Q6102
Q6103
Q6104
VR6201
IC6202
IC6201
Q6217
Q6202
Q6201
Q6203
VR6202
To RELAY ASSY CN29
ANP1729-B
CMK-P3X-A
N.C
N.C
CE
DA
CL
R CH
GND
L CH
MONO
MUTE
TUNE
+12V
+5V
STEREO
FM SD
AM SD
PIONEER

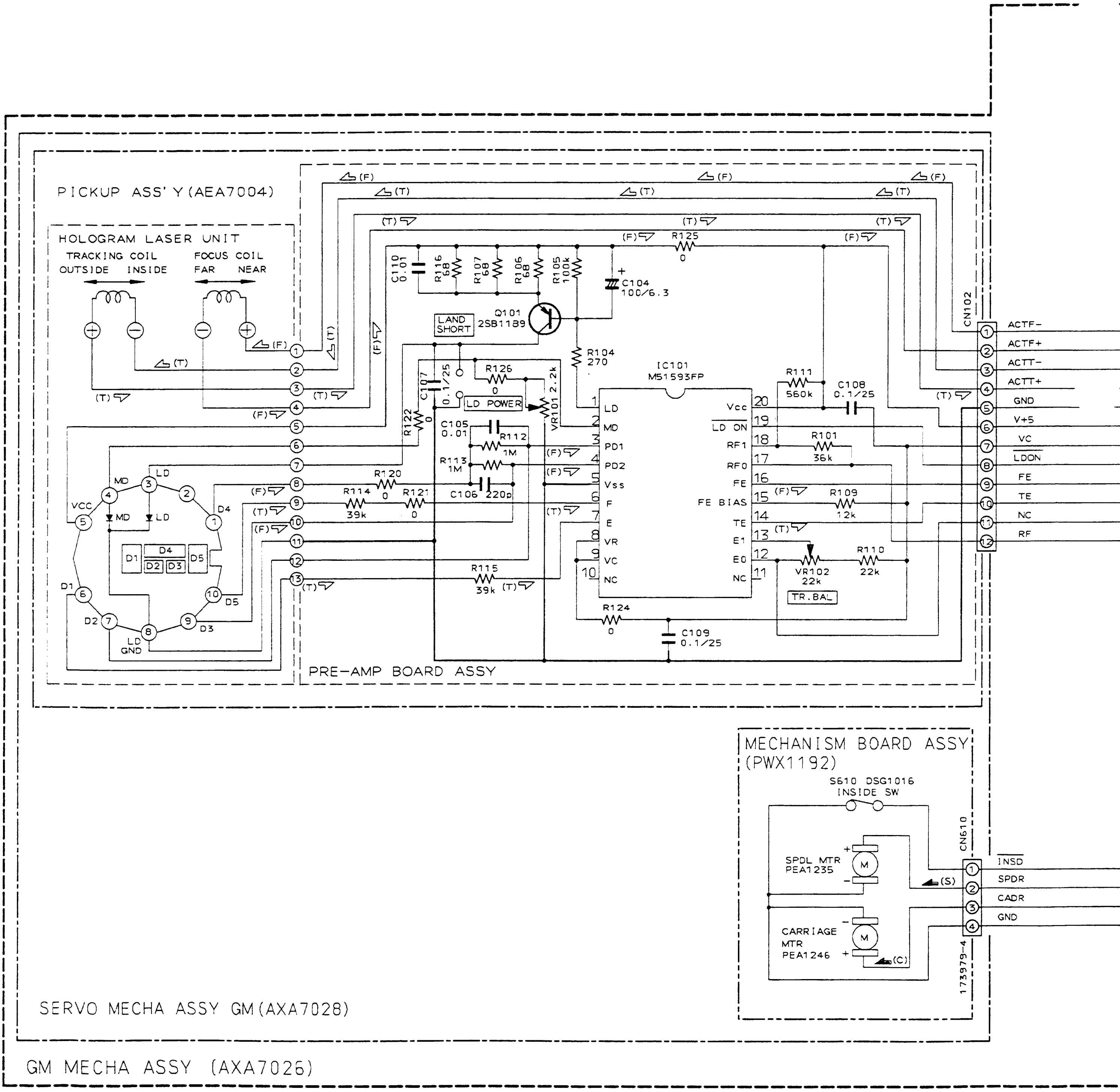
- This diagram is viewed from the mounted parts side.

4.3 GM MECHA ASSY


GM MECHA ASSY
MECHANISM BOARD ASSY
CARRIAGE MOTOR
PWX1192-
S810
INSIDE
CMK-54X
SPINDLE MOTOR
CN810
J662
D652
AWZ7836
ANZ7053-A
SENSOR PCB ASSY
MOTOR PCB ASSY
J652
J654
ANZ7054-A
AWZ7837
To GM-CD ASSY CN8002
MECHA PCB ASSY
RED
GREEN
D651
AWZ7835
ANZ7052-A
CN653
Q651
E C B
CN651
CN652
J656
R654
R652
R651
R653
CN654
To PICKUP ASSY
SW PCB ASSY
S651
CLMP
AWZ7838
ANZ7055-A
EJCT
S652
J656

The parts mounted on this PCB include all necessary parts for several destinations.
For further information for respective destinations, be sure to check with the schematic diagram.

- This diagram is viewed from the mounted parts side.


PICKUP ASS'Y (AEA7004)
HOLOGRAM LASER UNIT
TRACKING COIL
OUTSIDE INSIDE
FOCUS COIL
FAR NEAR
LD
MD
VCC
D1
D2
D3
D4
D5
LD GND
PRE-AMP BOARD ASSY
C110 0.01
R116 68
R107 68
R106 68
R105 100k
C104 100/6.3
R125 0
Q101 2SB1189
LAND SHORT
R104 270
C107 0.1/25
R126 0
LD POWER
VR101 2.2k
R122 0
C105 0.01
R112 1M
R113 1M
C106 220p
R120 0
R114 39k
R121 0
R115 39k
IC101 M51593FP
1 LD
2 MD
3 PD1
4 PD2
5 Vss
6 F
7 E
8 VR
9 VC
10 NC
20 Vcc
19 LD ON
18 RF1
17 RFO
16 FE
15 FE BIAS
14 TE
13 E1
12 E0
11 NC
R111 560k
C108 0.1/25
R101 36k
R109 12k
R110 22k
VR102 22k
TR.BAL
R124 0
C109 0.1/25
CN102
ACTF-
ACTF+
ACTT-
ACTT+
GND
V+5
VC
LDON
FE
TE
NC
RF
MECHANISM BOARD ASSY (PWX1192)
S610 DSG1016 INSIDE SW
SPDL MTR PEA1235
CARRIAGE MTR PEA1246
CN610
INSD
SPDR
CADR
GND
173979-4
SERVO MECHA ASSY GM (AXA7028)
GM MECHA ASSY (AXA7026)

SIGNAL ROUTE

(F) : FOCUS SERVO LOOP LINE

(T) : TRACKING SERVO LOOP LINE

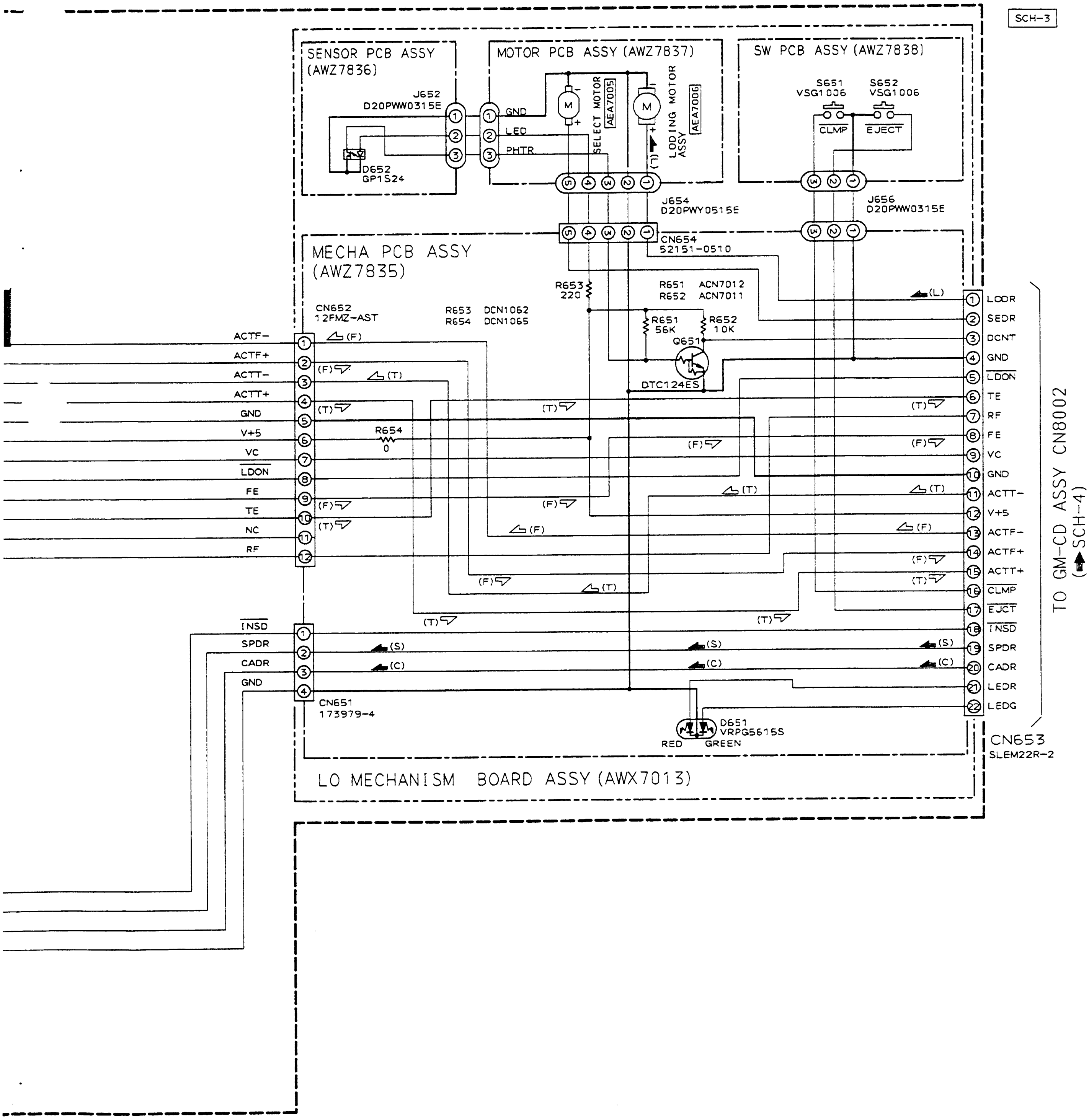
(L) : LOADING MOTOR ROUTE

(S) : SPINDLE MOTOR ROUTE

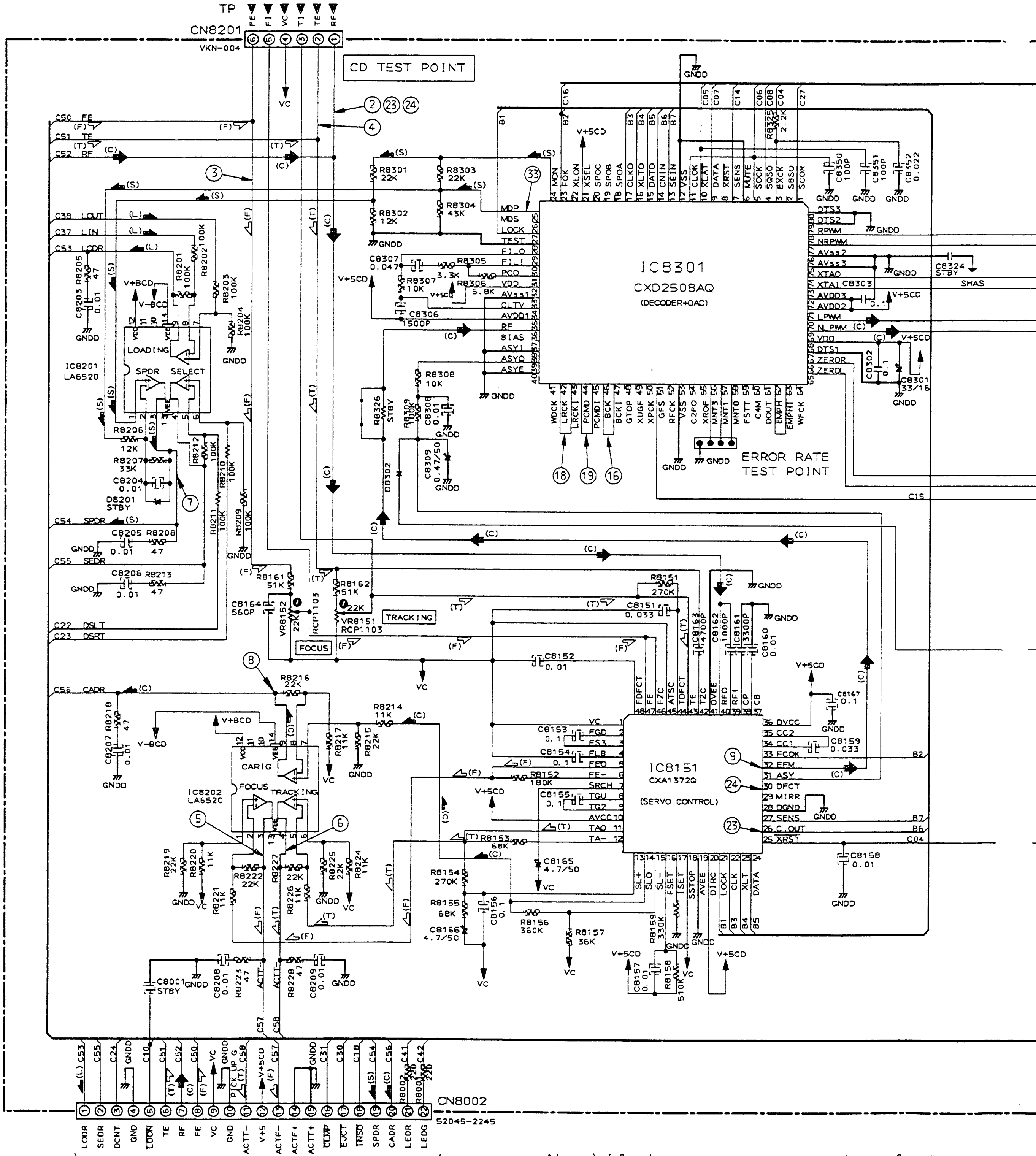
(C) : CARRIAGE MOTOR ROUTE

SCH-3

GM MECHA ASSY


SCH-3
SENSOR PCB ASSY (AWZ7836)
J652
D20PWW0315E
D652
GP1S24
MOTOR PCB ASSY (AWZ7837)
GND
LED
PHTR
SELECT MOTOR
AEA7005
LODING MOTOR ASSY
AEA7006
(L)
SW PCB ASSY (AWZ7838)
S651
VSG1006
S652
VSG1006
CLMP
EJECT
J654
D20PWY0515E
J656
D20PWW0315E
CN654
52151-0510
MECHA PCB ASSY (AWZ7835)
R653
220
R651 ACN7012
R652 ACN7011
CN652
12FMZ-AST
R653 DCN1062
R654 DCN1065
R651
56K
R652
10K
Q651
DTC124ES
R654
0
ACTF−
ACTF+
ACTT−
ACTT+
GND
V+5
VC
LDON
FE
TE
NC
RF
(F)
(T)
(L)
(S)
(C)
INSD
SPDR
CADR
GND
CN651
173979-4
D651
VRPG5615S
RED
GREEN
LODR
SEDR
DCNT
GND
LDON
TE
RF
FE
VC
GND
ACTT−
V+5
ACTF−
ACTF+
ACTT+
CLMP
EJCT
INSD
SPDR
CADR
LEDR
LEDG
CN653
SLEM22R-2
TO GM-CD ASSY CN8002
(➡SCH-4)
LO MECHANISM BOARD ASSY (AWX7013)

4.4 GM-CD ASSY AND HOME SW ASSY

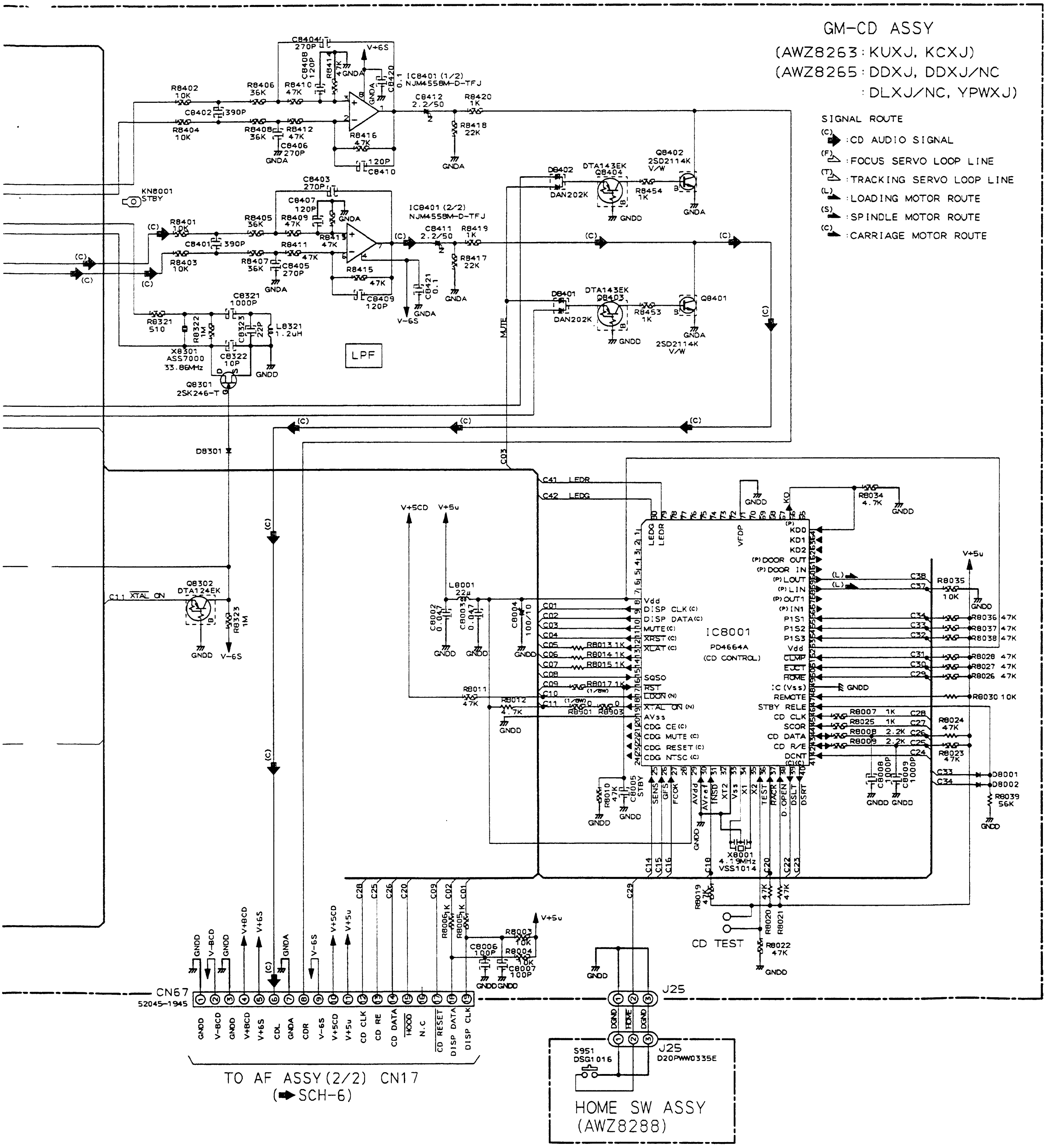

TP
FE FI VC TI TE RF
CN8201
VKN-004
CD TEST POINT
IC8301
CXD2508AQ
(DECODER+DAC)
IC8151
CXA1372Q
(SERVO CONTROL)
IC8201
LA6520
IC8202
LA6520
LOADING
SPDR
SELECT
CARIG
FOCUS
TRACKING
ERROR RATE
TEST POINT
V+5CD
V+8CD
V-8CD
GNDD
VC
C50 FE
C51 TE
C52 RF
C38 LOUT
C37 LIN
C53 LODR
C54 SPDR
C55 SEDR
C22 DSLT
C23 DSRT
C56 CADR
C57
C58
C15
B2
B7
B6
C04
SHAS
R8301 22K
R8303 22K
R8302 12K
R8304 43K
R8305 3.3K
R8306 6.8K
R8307 10K
R8308 10K
R8326 STBY
C8307 0.047
C8306 1500P
C8350 100P
C8351 100P
C8352 0.022
C8324 STBY
C8302 0.1
C8301 33/16
C8308 0.01
C8309 0.47/50
D8302
R8201 100K
R8202 100K
R8203 100K
R8204 100K
R8205 47
C8203 0.01
R8206 12K
R8207 33K
C8204 0.01
D8201 STBY
R8212 100K
R8210 100K
R8211 100K
R8209 100K
C8205 0.01
R8208 47
C8206 0.01
R8213 47
R8161 51K
R8162 51K
C8164 560P
VR8152 22K
VR8151 22K
RCP1103
FOCUS
TRACKING
R8151 270K
C8151 0.033
C8163 4700P
C8162 1000P
C8161 1000P
C8161 3300P
C8160 0.01
C8152 0.01
C8167 0.1
C8159 0.033
C8153 0.1
C8154 0.1
C8155 0.1
R8152 180K
R8153 68K
C8165 4.7/50
R8154 270K
R8155 68K
C8156 0.1
C8166 4.7/50
R8156 360K
R8157 36K
R8159 330K
C8157 0.01
R8158 510K
C8158 0.01
R8216 22K
R8214 11K
R8215 22K
R8217 11K
R8218 47
C8207 0.01
R8219 22K
R8220 11K
R8221 11K
R8222 22K
R8227 22K
R8226 11K
R8225 22K
R8224 11K
C8001 STBY
C8208 0.01
R8223 47
R8228 47
C8209 0.01
ACTF-
ACTT-
CN8002
52045-2245
LODR SEDR DCNT GND LDDN TE RF FE VC GND ACTT- V+5 ACTF- ACTF+ ACTT+ CLMP EJCT TNSD SPDR CADR LEDR LEDG
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬ ⑭ ⑮ ⑯ ⑰ ⑱ ⑲ ⑳ ㉑ ㉒

TO GM MECHA ASSY CN653
(➡SCH-3)

Note) If the parts are not identified.
the followings are used.

1SS254-T

SCH-4

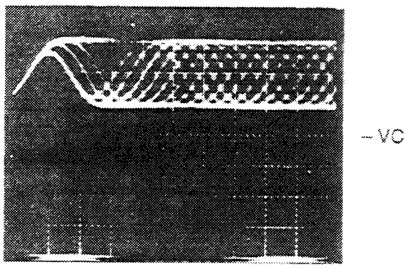

GM-CD ASSY
(AWZ8263 : KUXJ, KCXJ)
(AWZ8265 : DDXJ, DDXJ/NC
: DLXJ/NC, YPWXJ)
SIGNAL ROUTE
(C) :CD AUDIO SIGNAL
(F) :FOCUS SERVO LOOP LINE
(T) :TRACKING SERVO LOOP LINE
(L) :LOADING MOTOR ROUTE
(S) :SPINDLE MOTOR ROUTE
(C) :CARRIAGE MOTOR ROUTE
IC8401 (1/2) NJM4558M-D-TFJ
IC8401 (2/2) NJM4558M-D-TFJ
LPF
KN8001 STBY
X8301 ASS7000 33.86MHz
Q8301 2SK246-T
Q8302 DTA124EK
Q8401 2SD2114K V/W
Q8402 2SD2114K V/W
Q8403 DTA143EK
Q8404 DTA143EK
D8401 DAN202K
D8402 DAN202K
D8301
MUTE
IC8001 PD4664A (CD CONTROL)
X8001 4.19MHz VSS1014
L8001 22µ
CD TEST
CN67 52045-1945
GNDD
V-BCD
GNDD
V+BCD
V+6S
CDL
GNDA
CDR
V-6S
V+5CD
V+5u
CD CLK
CD RE
CD DATA
HOOD
N.C
CD RESET
DISP DATA
DISP CLK
J25
DGND
HOME
DGND
S951 DSG1016
J25 D20PWW0335E
HOME SW ASSY
(AWZ8288)
TO AF ASSY (2/2) CN17
(➡SCH-6)

Waveforms

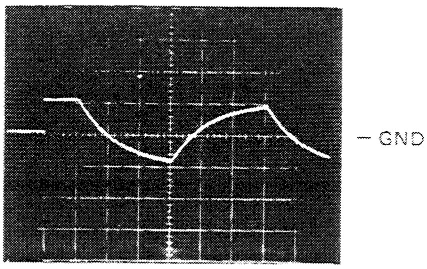
Note: The encircled numbers denote measuring point in the schematic disgram.

*2 FOCUS–IN: Press the key without loading a disc.

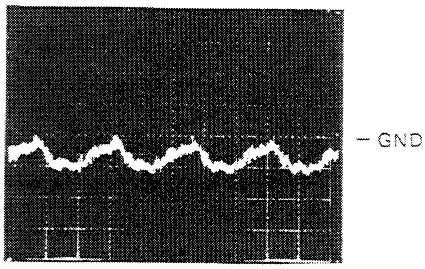
② TP(CN8201)-Pin1: PLAY MODE (RF)
500mV/div 500nsec/div



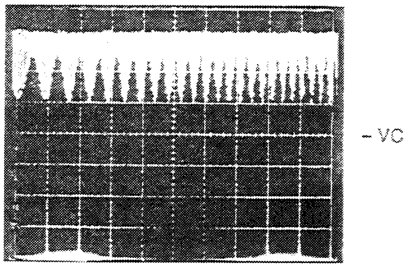
⑤ IC8202-Pin3: FOCUS-IN (*2) MODE (FODR)
1V/div 200msec/div



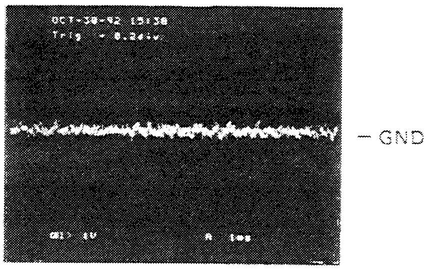
⑦ IC8201-Pin3: PLAY MODE (SPDR)
1V/div 50msec/div



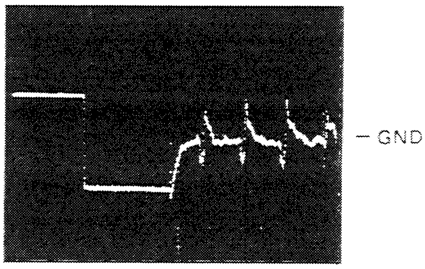
② TP(CN8201)-Pin1: TRACK SEARCH MODE (RF)
500mV/div 200µsec/div



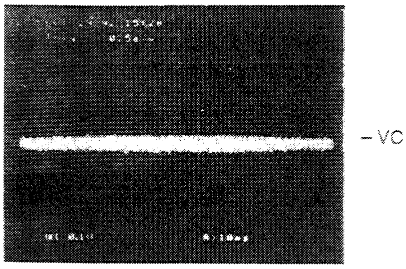
⑤ IC8202-Pin3: PLAY MODE (FODR)
1V/div 1msec/div



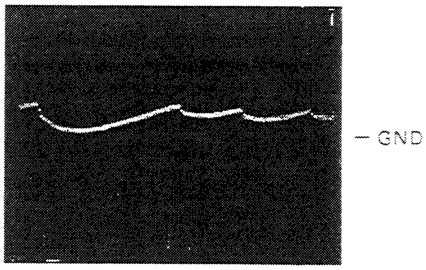
⑦ IC8201-Pin3: TRACK SEARCH MODE (SPDR)
2V/div 50msec/div



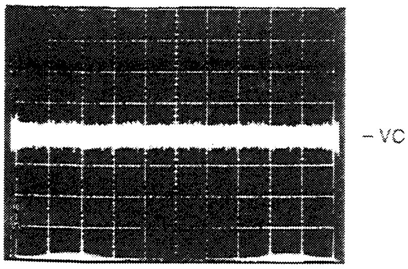
③ TP(CN8201)-Pin6: PLAY MODE (FOER)
100mV/div 10msec/div



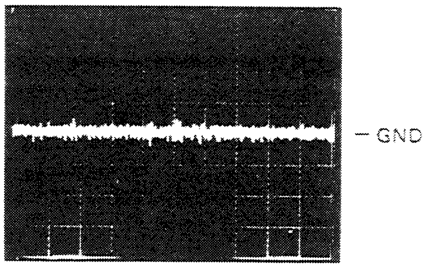
⑧ IC8202-Pin9: PLAY MODE (CADR)
0.2V/div 2sec/div



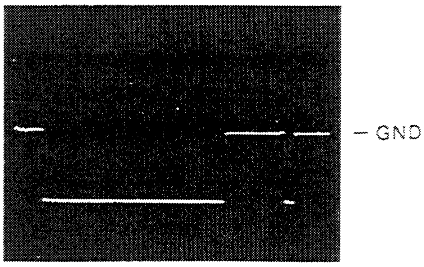
④ TP(CN8201)-Pin2: PLAY MODE (TRER)
1V/div 1msec/div



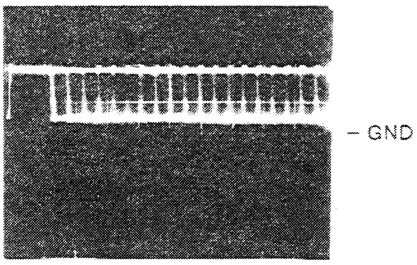
⑥ IC8202-Pin4: PLAY MODE (TRDR)
500mV/div 1msec/div



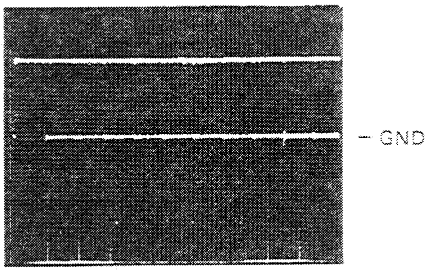
⑧ IC8202-Pin9: TRACK SEARCH MODE (CADR)
2V/div 200msec/div



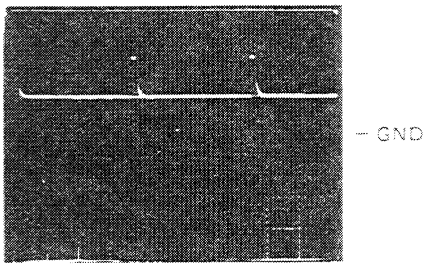
⑨ IC8151-Pin32: PLAY MODE (EFM)
2V/div 500nsec/div



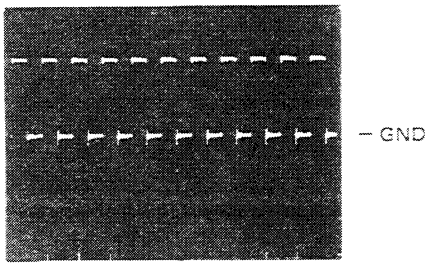
⑲ IC8301-Pin44: PLAY MODE (1kHz)
(PCMD)
2V/div 500nsec/div



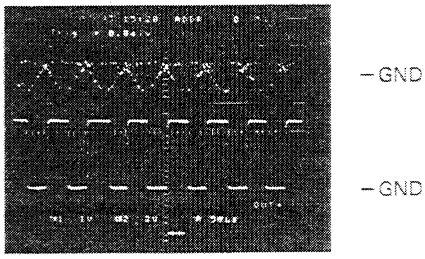
㉝ IC8301-Pin25: PLAY MODE (MDP)
2V/div 2μsec/div



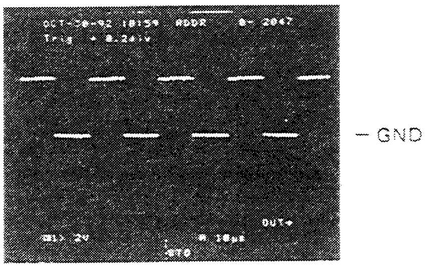
⑯ IC8301-Pin46: PLAY MODE (1kHz)
(BCK)
2V/div 500nsec/div



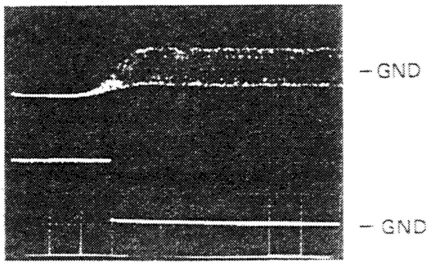
㉓ : TRACK SEARCH MODE
Upper: TP(CN8201)-Pin1 (RF) 1V/div
Lower: IC8151-Pin26 (C. OUT)
2V/div 50μsec/div



⑱ IC8301-Pin42: PLAY MODE (1kHz)
(LRCK)
2V/div 10μsec/div



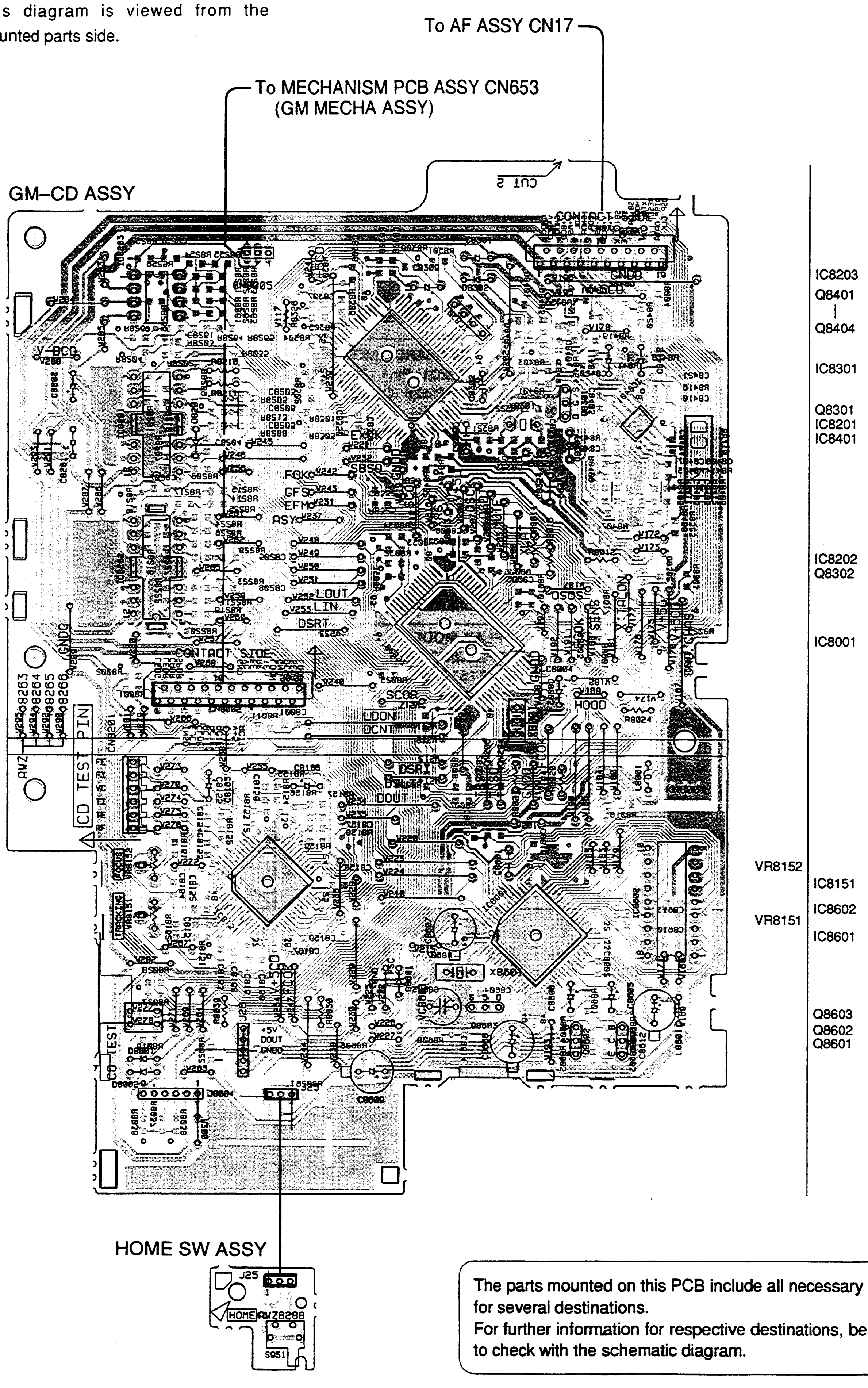
㉔ : PLAY MODE
Upper: TP(CN8201)-Pin1 (RF) 1V/div
Lower: IC8151-Pin30 (DFCT)
5V/div 200μsec/div



XR-P260F

PCB-3

- This diagram is viewed from the mounted parts side.

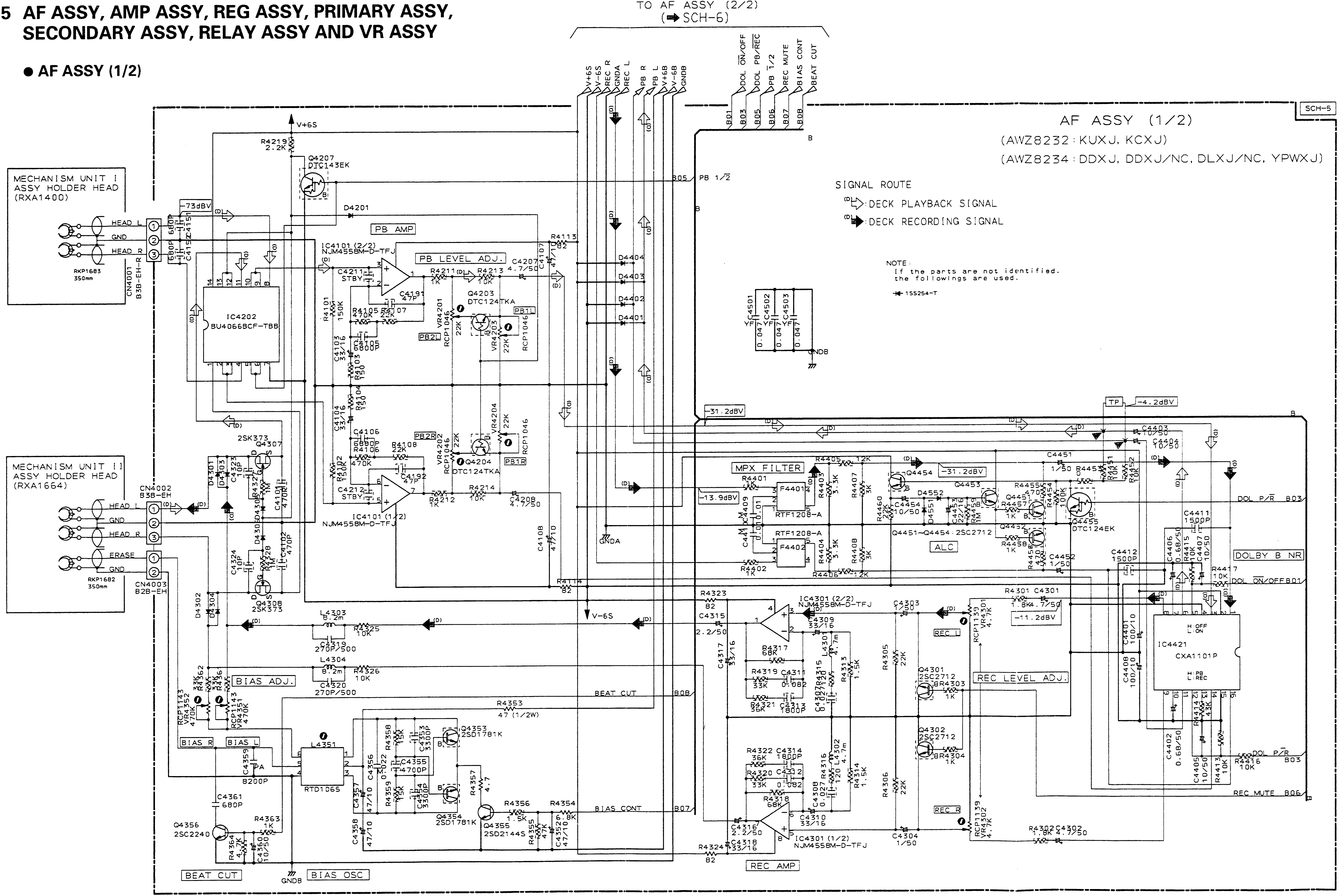


To AF ASSY CN17
To MECHANISM PCB ASSY CN653
(GM MECHA ASSY)
GM–CD ASSY
CUT 2
CONTACT
CONTACT SIDE
CD TEST PIN
IC8203
Q8401
Q8404
IC8301
Q8301
IC8201
IC8401
IC8202
Q8302
IC8001
VR8152
VR8151
IC8151
IC8602
IC8601
Q8603
Q8602
Q8601
HOME SW ASSY
J25
HOME
AWZ8288
S951

The parts mounted on this PCB include all necessary parts for several destinations.
For further information for respective destinations, be sure to check with the schematic diagram.

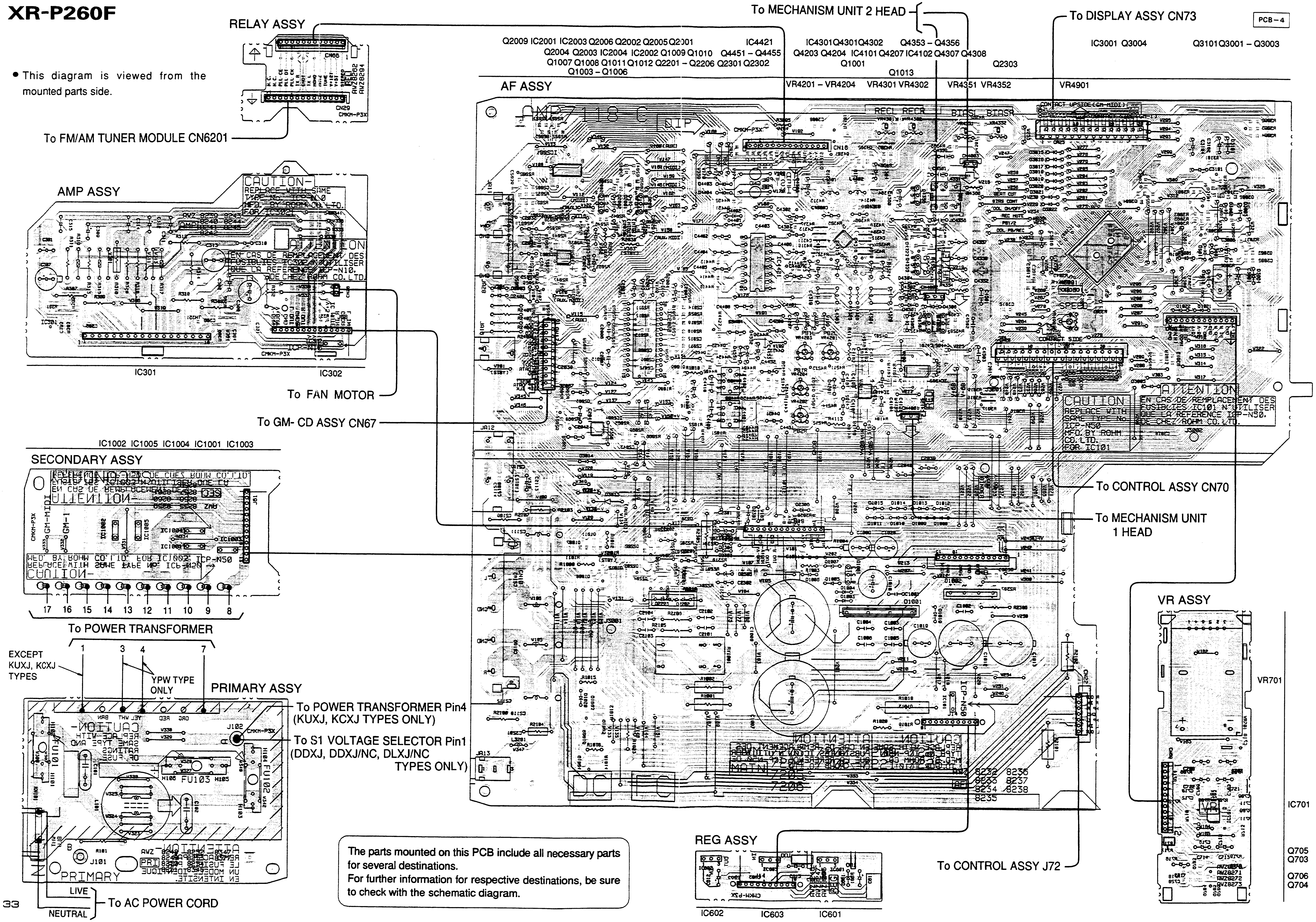
4.5 AF ASSY, AMP ASSY, REG ASSY, PRIMARY ASSY, SECONDARY ASSY, RELAY ASSY AND VR ASSY

● AF ASSY (1/2)


TO AF ASSY (2/2)
(➡SCH-6)
V+6S
V-6S
REC R
GNDA
REC L
PB R
PB L
V+6B
V-6B
GNDB
DOL ON/OFF
DOL PB/REC
PB 1/2
REC MUTE
BIAS CONT
BEAT CUT
B01
B03
B05
B06
B07
B08
SCH-5
AF ASSY (1/2)
(AWZ8232 : KUXJ, KCXJ)
(AWZ8234 : DDXJ, DDXJ/NC, DLXJ/NC, YPWXJ)
SIGNAL ROUTE
DECK PLAYBACK SIGNAL
DECK RECORDING SIGNAL
NOTE :
If the parts are not identified,
the followings are used.
1SS254-T
MECHANISM UNIT I
ASSY HOLDER HEAD
(RXA1400)
HEAD L
GND
HEAD R
RKP1683
350mm
CN4001
B3B-EH-R
-73dBV
MECHANISM UNIT II
ASSY HOLDER HEAD
(RXA1664)
CN4002
B3B-EH
ERASE
RKP1682
350mm
CN4003
B2B-EH
R4219
2.2K
Q4207
DTC143EK
D4201
PB AMP
IC4101 (2/2)
NJM4558M-D-TFJ
PB LEVEL ADJ.
IC4202
BU4066BCF-TBB
C4211
STBY
R4211
R4213
Q4203
DTC124TKA
C4207
4.7/50
C4107
R4113
82
VR4201
RCP1046
22K
VR4203
PB1L
PB2L
R4101
150K
R4105
470K
R4107
22K
C4191
47P
C4105
6800P
C4103
33/16
R4103
150
R4104
150
C4104
33/16
C4106
6800P
R4106
470K
R4108
22K
PB2R
VR4202
Q4204
DTC124TKA
VR4204
PB1R
C4192
47P
C4212
STBY
R4212
1K
R4214
10K
C4208
4.7/50
IC4101 (1/2)
NJM4558M-D-TFJ
C4108
47/10
R4114
82
2SK373
Q4307
Q4308
2SK373
D4301
D4303
C4323
10P
R4327
C4101
470P
C4102
470P
D4305
D4306
R4328
1M
C4324
10P
D4302
D4304
D4404
D4403
D4402
D4401
GNDA
V-6S
L4303
8.2m
R4325
10K
C4319
270P/500
L4304
8.2m
R4326
10K
C4320
270P/500
BIAS ADJ.
RCP1143
VR4352
470K
R4362
33K
R4361
RCP1143
VR4351
470K
BIAS R
BIAS L
BEAT CUT
R4353
47 (1/2W)
L4351
RTD1065
C4359
8200P
C4356
0.022
C4355
4700P
R4358
15K
C4353
3300P
Q4353
2SD1781K
R4359
15K
C4354
3300P
Q4354
2SD1781K
C4357
47/10
C4358
47/10
R4357
4.7
R4356
1.5K
R4354
6.8K
Q4355
2SD2144S
R4355
47K
C4352
47/10
BIAS CONT
C4361
680P
Q4356
2SC2240
R4363
1K
R4364
4.7K
C4360
10/50
BEAT CUT
BIAS OSC
GNDB
C4501
0.047
C4502
0.047
C4503
0.047
GNDB
-31.2dBV
TP
-4.2dBV
C4403
10/50
C4404
10/50
MPX FILTER
R4401
R4405
12K
R4403
3.3K
R4407
3K
F4401
RTF1208-A
-13.9dBV
C4409
0.01
C4410
0.01
F4402
RTF1208-A
R4402
1K
R4404
3.3K
R4408
3K
R4406
12K
Q4454
-31.2dBV
C4451
1/50
R4453
R4451
10K
R4452
10K
R4460
22K
C4454
10/50
D4551
D4552
Q4453
C4453
22/16
R4459
1M
R4455
470K
R4457
1K
Q4452
R4454
100K
Q4455
DTC124EK
Q4451
R4458
1K
R4456
470
C4452
1/50
Q4451~Q4454 : 2SC2712
ALC
DOL P/R
DOLBY B NR
C4411
1500P
C4412
1500P
C4406
0.68/50
R4415
10K
C4407
10/50
R4417
10K
DOL ON/OFF
R4323
82
C4315
2.2/50
IC4301 (2/2)
NJM4558M-D-TFJ
C4309
33/16
C4303
1/50
R4301
1.8K
C4301
4.7/50
-11.2dBV
REC L
RCP1139
VR4301
4.7K
C4317
33/16
R4317
68K
R4319
33K
C4311
0.082
R4321
33K
C4313
1800P
C4307
0.027
R4315
120
L4301
4.7m
R4313
1.5K
R4305
22K
Q4301
2SC2712
R4303
1K
REC LEVEL ADJ.
C4401
100/10
C4408
100/10
IC4421
CXA1101P
H: OFF
L: ON
H: PB
L: REC
R4322
36K
C4314
1800P
R4320
33K
C4312
0.082
R4318
68K
C4308
0.027
R4316
120
L4302
4.7m
R4314
1.5K
R4306
22K
Q4302
2SC2712
R4304
1K
REC R
RCP1139
VR4302
4.7K
R4302
1.8K
C4302
4.7/50
C4402
0.68/50
C4405
10/50
R4414
4.7K
R4413
10K
R4416
10K
REC MUTE
C4316
2.2/50
C4318
33/16
R4324
82
C4310
33/16
C4304
1/50
IC4301 (1/2)
NJM4558M-D-TFJ
REC AMP

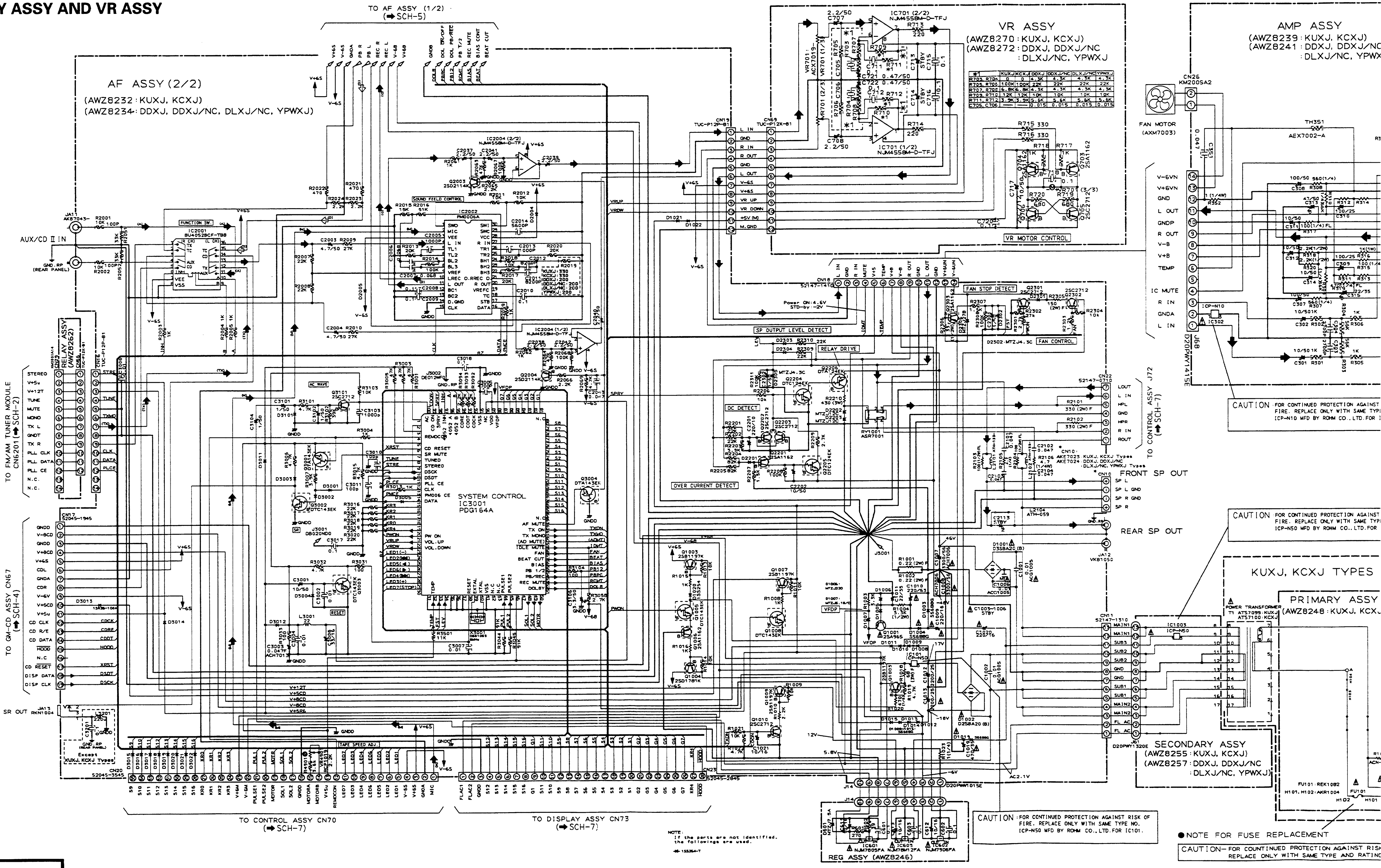
XR-P260F

- This diagram is viewed from the mounted parts side.

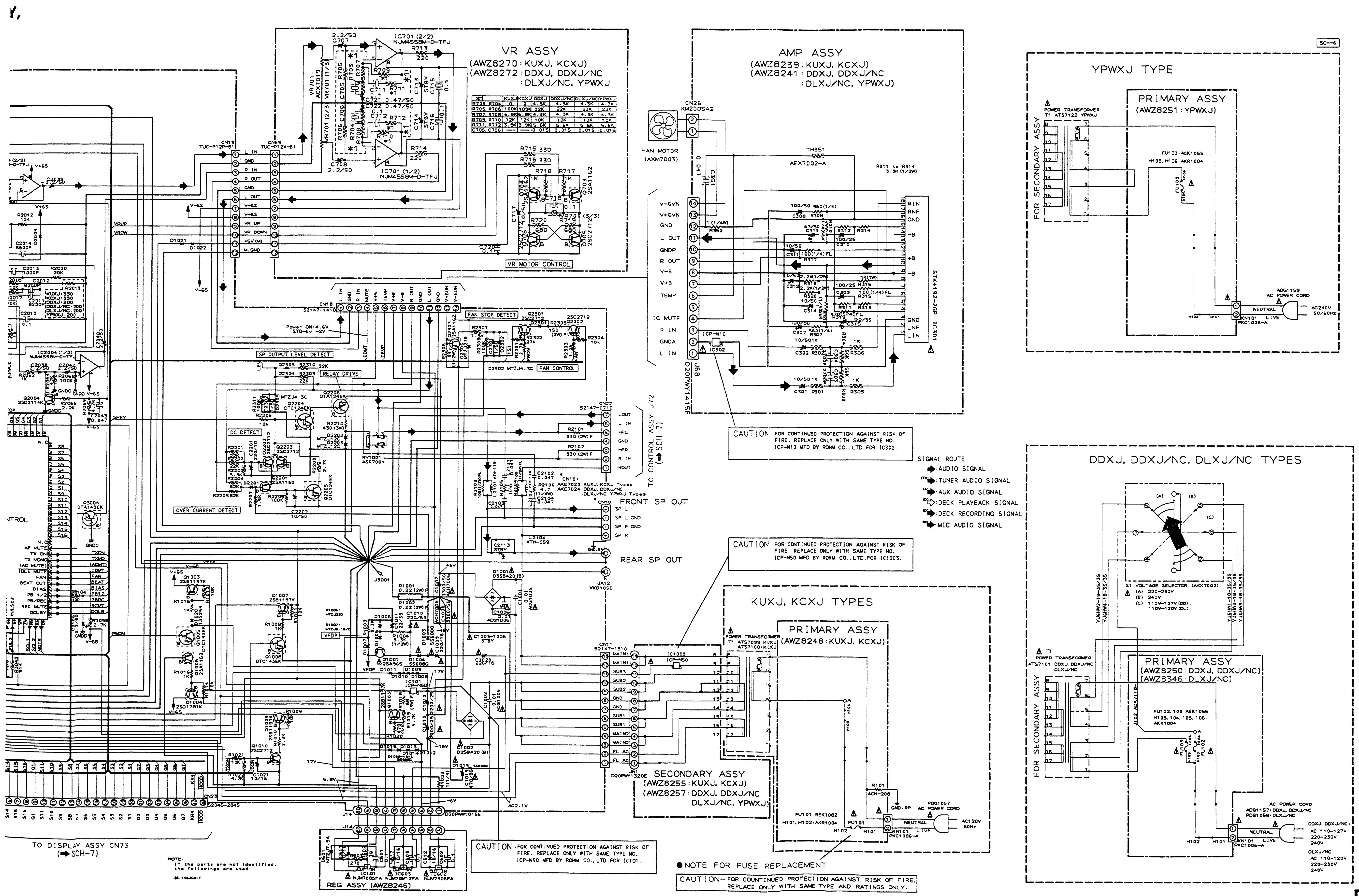

PCB-4
RELAY ASSY
CN65
CN29
CMKM-P3X
To FM/AM TUNER MODULE CN6201
AMP ASSY
IC301
IC302
To FAN MOTOR
To GM- CD ASSY CN67
IC1002 IC1005 IC1004 IC1001 IC1003
SECONDARY ASSY
17 16 15 14 13 12 11 10 9 8
To POWER TRANSFORMER
1 3 4 7
EXCEPT KUXJ, KCXJ TYPES
YPW TYPE ONLY
PRIMARY ASSY
To POWER TRANSFORMER Pin4 (KUXJ, KCXJ TYPES ONLY)
To S1 VOLTAGE SELECTOR Pin1 (DDXJ, DDXJ/NC, DLXJ/NC TYPES ONLY)
LIVE
NEUTRAL
To AC POWER CORD
To MECHANISM UNIT 2 HEAD
To DISPLAY ASSY CN73
Q2009 IC2001 IC2003 Q2006 Q2002 Q2005 Q2001
Q2004 Q2003 IC2004 IC2002 Q1009 Q1010
Q1007 Q1008 Q1011 Q1012 Q2201 – Q2206 Q2301 Q2302
Q1003 – Q1006
IC4421
Q4451 – Q4455
IC4301 Q4301 Q4302
Q4203 Q4204 IC4101 Q4207 IC4102 Q4307 Q4308
Q1001
Q4353 – Q4356
Q1013
Q2303
IC3001 Q3004
Q3101 Q3001 – Q3003
AF ASSY
VR4201 – VR4204 VR4301 VR4302
VR4351 VR4352
VR4901
To CONTROL ASSY CN70
To MECHANISM UNIT 1 HEAD
VR ASSY
VR701
IC701
Q705
Q703
Q706
Q704
REG ASSY
IC602 IC603 IC601
To CONTROL ASSY J72
CAUTION- REPLACE WITH SAME TYPE No. ICP-N10 MFD. BY ROHM CO.LTD. FOR IC302
ATTENTION EN CAS DE REMPLACEMENT DES FUSIBLES IC302 N'UTILISER QUE LA REFERENCE ICP-N10. DE CHEZ ROHM CO.LTD.
CAUTION REPLACE WITH SAME TYPE No. ICP-N50 MFD. BY ROHM CO.LTD. FOR IC101
ATTENTION EN CAS DE REMPLACEMENT DES FUSIBLES IC101 N'UTILISER QUE LA REFERENCE ICP-N50. DE CHEZ ROHM CO.LTD.

The parts mounted on this PCB include all necessary parts for several destinations.
For further information for respective destinations, be sure to check with the schematic diagram.

● AF ASSY (2/2), AMP ASSY, REG ASSY, PRIMARY ASSY, SECONDARY ASSY, RELAY ASSY AND VR ASSY


TO AF ASSY (1/2) (➡ SCH-5)
AF ASSY (2/2)
(AWZ8232 : KUXJ, KCXJ)
(AWZ8234 : DDXJ, DDXJ/NC, DLXJ/NC, YPWXJ)
VR ASSY
(AWZ8270 : KUXJ, KCXJ)
(AWZ8272 : DDXJ, DDXJ/NC : DLXJ/NC, YPWXJ)
AMP ASSY
(AWZ8239 : KUXJ, KCXJ)
(AWZ8241 : DDXJ, DDXJ/NC : DLXJ/NC, YPWXJ)
FAN MOTOR (AXM7003)
VR MOTOR CONTROL
SYSTEM CONTROL IC3001 PDG164A
RELAY ASSY (AWZ8262)
TO FM/AM TUNER MODULE CN6201 (➡ SCH-2)
TO GM-CD ASSY CN67 (➡ SCH-4)
AUX/CD II IN
SR OUT
SOUND FIELD CONTROL
FUNCTION SW
AC WAVE
RESET
TAPE SPEED ADJ
FAN STOP DETECT
FAN CONTROL
SP OUTPUT LEVEL DETECT
RELAY DRIVE
DC DETECT
OVER CURRENT DETECT
FRONT SP OUT
REAR SP OUT
TO CONTROL ASSY J72 (➡ SCH-7)
TO CONTROL ASSY CN70 (➡ SCH-7)
TO DISPLAY ASSY CN73 (➡ SCH-7)
KUXJ, KCXJ TYPES
PRIMARY ASSY (AWZ8248 : KUXJ, KCX
POWER TRANSFORMER T1 ATS7099 : KUXJ ATS7100 : KCXJ
SECONDARY ASSY
(AWZ8255 : KUXJ, KCXJ)
(AWZ8257 : DDXJ, DDXJ/NC : DLXJ/NC, YPWXJ)
REG ASSY (AWZ8246)
CAUTION FOR CONTINUED PROTECTION AGAINST FIRE. REPLACE ONLY WITH SAME TYP ICP-N10 MFD BY ROHM CO., LTD. FOR
CAUTION FOR CONTINUED PROTECTION AGAINST FIRE. REPLACE ONLY WITH SAME TYP ICP-N50 MFD BY ROHM CO., LTD. FOR
CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE NO. ICP-N50 MFD BY ROHM CO., LTD. FOR IC101.
● NOTE FOR FUSE REPLACEMENT
CAUTION - FOR COUNTINUED PROTECTION AGAINST RISK REPLACE ONLY WITH SAME TYPE AND RATING
FU101 : REK1082
H101, H102 : AKR1004
NOTE : If the parts are not identified, the followings are used.

SCH−6 AF ASSY (2/2), AMP ASSY, REG ASSY, PRIMARY ASSY, SECONDARY ASSY, RELAY ASSY, VR ASSY


VR ASSY
(AWZ8270 : KUXJ, KCXJ)
(AWZ8272 : DDXJ, DDXJ/NC : DLXJ/NC, YPWXJ)
IC701 (2/2) NJM4558M-D-TFJ
IC701 (1/2) NJM4558M-D-TFJ
VR MOTOR CONTROL
AMP ASSY
(AWZ8239 : KUXJ, KCXJ)
(AWZ8241 : DDXJ, DDXJ/NC : DLXJ/NC, YPWXJ)
CN26 KM200SA2
FAN MOTOR (AXM7003)
TH351 AEX7002-A
STK4192-2DP IC301
J68 D20PWY1415E
TO CONTROL ASSY J72 (SCH-7)
FAN STOP DETECT
FAN CONTROL
SP OUTPUT LEVEL DETECT
RELAY DRIVE
DC DETECT
OVER CURRENT DETECT
RY1001 ASE7001
FRONT SP OUT
REAR SP OUT
JA12 VKB1050
CN11 52147-1310
J61 D20PWY1320E
SECONDARY ASSY
(AWZ8255 : KUXJ, KCXJ)
(AWZ8257 : DDXJ, DDXJ/NC : DLXJ/NC, YPWXJ)
REG ASSY (AWZ8246)
TO DISPLAY ASSY CN73 (SCH-7)
YPWXJ TYPE
PRIMARY ASSY (AWZ8251 : YPWXJ)
FOR SECONDARY ASSY
AC POWER CORD
AC240V 50/60Hz
KUXJ, KCXJ TYPES
PRIMARY ASSY (AWZ8248 : KUXJ, KCXJ)
AC120V 60Hz
DDXJ, DDXJ/NC, DLXJ/NC TYPES
S1 VOLTAGE SELECTOR (AKX7002)
(A) 220–230V
(B) 240V
(C) 110V–127V (DD), 110V–120V (DL)
PRIMARY ASSY
(AWZ8250 : DDXJ, DDXJ/NC)
(AWZ8346 : DLXJ/NC)
SIGNAL ROUTE
AUDIO SIGNAL
TUNER AUDIO SIGNAL
AUX AUDIO SIGNAL
DECK PLAYBACK SIGNAL
DECK RECORDING SIGNAL
MIC AUDIO SIGNAL

CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE NO. ICP-N10 MFD BY ROHM CO., LTD. FOR IC302.

CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE NO. ICP-N50 MFD BY ROHM CO., LTD. FOR IC1003.

CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE NO. ICP-N50 MFD BY ROHM CO., LTD. FOR IC101.

NOTE : If the parts are not identified, the followings are used.

● NOTE FOR FUSE REPLACEMENT

CAUTION – FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE AND RATINGS ONLY.

AF ASSY (2/2), AMP ASSY, REG ASSY, PRIMARY ASSY, SECONDARY ASSY, RELAY ASSY, VR ASSY

SCH-6

NOTE FOR SCHEMATIC DIAGRAMS (TYPE 1A)

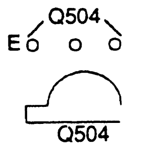
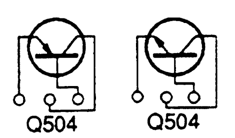
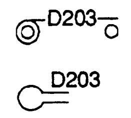
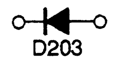
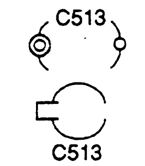
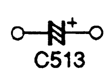
1. **When ordering service parts, be sure to refer to "PARTS LIST of EXPLODED VIEWS" or "PCB PARTS LIST".**
2. **Since these are basic circuits, some parts of them or the values of some components may be changed for improvement.**
3. **RESISTORS:**
   Unit: k:kΩ, M:MΩ, or Ω unless otherwise noted.
   Rated power: 1/4W, 1/6W, 1/8W, 1/10W unless otherwise noted.
   Tolerance: (F): ±1%, (G): ±2%, (K): ±10%, (M): ±20% or ±5% unless otherwise noted.
4. **CAPACITORS:**
   Unit: p:pF or μF unless otherwise noted.
   Ratings: capacitor (μF) / voltage (V) unless otherwise noted.
   Rated voltage: 50V except for electolytic capacitors.
5. **COILS:**
   Unit: m:mH or μH unless otherwise noted.
6. **VOLTAGE AND CURRENT:**
   ▭V : SIGNAL voltage at rated output.
   ▭ or ← V :
   DC voltage (V) at no input signal unless otherwise noted.
   Value in ( ) is DC voltage at rated power.
   ⇐ mA or ← mA :
   DC current at no input signal unless otherwise noted.
7. **OTHERS:**
   - ⊘ or ● : Adjusting point.
   - ◀ : Measurement point.
   - The ⚠ mark found on some components parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.
8. **SCH-☐ ON THE SCHEMATIC DIAGRAM:**
   - SCH-☐ indicates the drawing number of the schematic diagram. (SCH stands for schematic diagram.)
9. **SWITCHES** (Underline indicates switch position):

CONTROL ASSY
S501: POWER STANDBY/ON
S502: DOLBY ON/OFF
S503: ◀◀ ⏮ –
S504: BEST
S505: REC/STOP
S506: ASES/COPY
S507: FM/AM
S508: TAPE I/II
S509: STOP (■)
S510: START (▶)
S511: ▶▶ ⏭ +
S513: KARAOKE
S514: AUX/CD II
S515: CD
S516: P. BASS (DEMO)
S517: TIMER
S518: FREQ/STATION
S519: MEMORY
S520: DISPLAY/CLOCK

DISPLAY ASSY
S401: DISC SELECT (+)
S402: DISC SELECT (–)

NOTE FOR PCB DIAGRAMS:

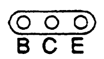
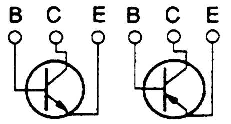
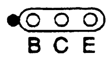
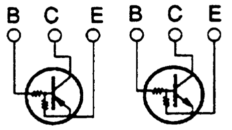
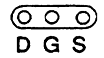
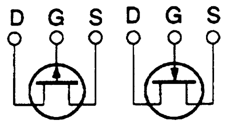
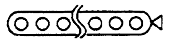
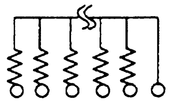
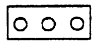
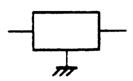
1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

Symbol in PCB Diagrams	Symbol in Schematic Diagrams	Part Name
		Transistor
		Diode
		Capacitor (Polarized)

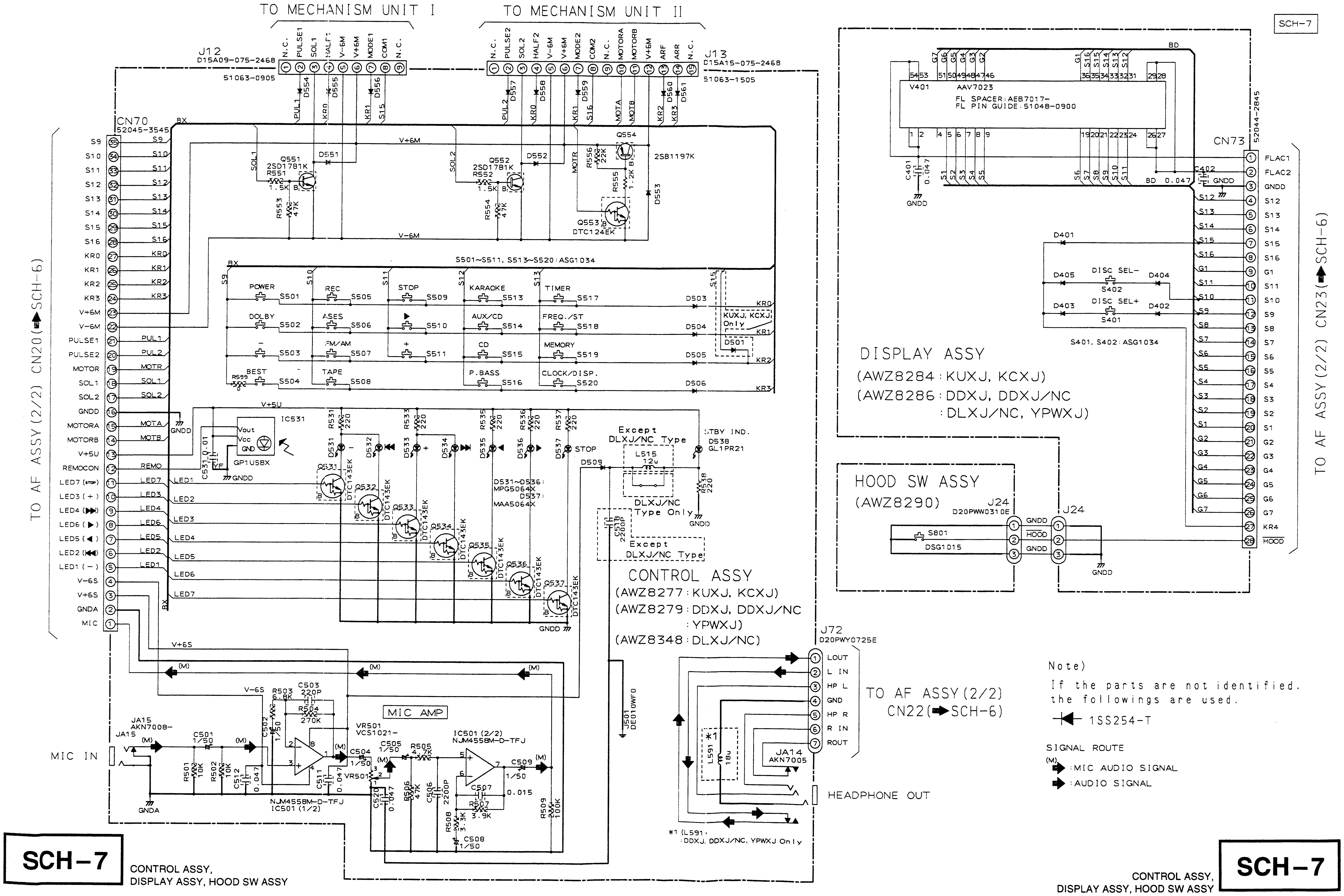
3. The transistor terminal marked with E or ⊏ shows the emitter.
4. The diode terminal marked with ◎ or ⊂ shows cathode side.
5. The capacitor terminal marked with ◎ or ⊏ shows negative terminal.

NOTE FOR PCB DIAGRAMS:

1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

Symbol in PCB Diagrams	Symbol in Schematic Diagrams	Part Name
		Transistor
		Transistor with resistor
		Field effect transistor
		Resistor array
		3- terminal regulator

4.6 CONTROL ASSY, DISPLAY ASSY AND HOOD SW ASSY


TO MECHANISM UNIT I
TO MECHANISM UNIT II
J12
D15A09-075-2468
51063-0905
N.C.
PULSE1
SOL1
HALF1
V-6M
V+6M
MODE1
COM1
N.C.
J13
D15A15-075-2468
51063-1505
PULSE2
SOL2
HALF2
MODE2
COM2
MOTORA
MOTORB
ARF
ARR
D554
D555
D556
D557
D558
D559
D560
D561
CN70
52045-3545
BX
S9
S10
S11
S12
S13
S14
S15
S16
KR0
KR1
KR2
KR3
V+6M
V-6M
PULSE1
PULSE2
MOTOR
SOL1
SOL2
GNDD
MOTORA
MOTORB
V+5U
REMOCON
LED7 (STOP)
LED3 (+)
LED4 (⏭)
LED6 (▶)
LED5 (◀)
LED2 (⏮)
LED1 (−)
V-6S
V+6S
GNDA
MIC
TO AF ASSY (2/2) CN20 (➡SCH-6)
Q551
2SD1781K
R551
1.5K
R553
47K
D551
Q552
2SD1781K
R552
1.5K
R554
47K
D552
Q554
2SB1197K
R556
22K
R555
1.2K
D553
Q553
DTC124EK
S501~S511, S513~S520: ASG1034
POWER S501
REC S505
STOP S509
KARAOKE S513
TIMER S517
DOLBY S502
ASES S506
▶ S510
AUX/CD S514
FREQ./ST S518
− S503
FM/AM S507
+ S511
CD S515
MEMORY S519
R599
BEST S504
TAPE S508
P.BASS S516
CLOCK/DISP. S520
D503
D504
D505
D506
KUXJ, KCXJ Only
D501
V+5U
IC531
GP1U58X
Vout
Vcc
GND
C531 0.01
R531 220
R533 220
R535 220
R536 220
R537 220
D531
D532
D533
D534
D535
D536
D537
STOP
Q531 DTC143EK
Q532 DTC143EK
Q533 DTC143EK
Q534 DTC143EK
Q535 DTC143EK
Q536 DTC143EK
Q537 DTC143EK
D531~D536: MPG5064X
D537: MAA5064X
Except DLXJ/NC Type
STBY IND.
D538
GL1PR21
D509
L515
12μ
DLXJ/NC Type Only
R538 220
C518 2200P
Except DLXJ/NC Type
J501
DE010WF0
V+6S
MIC AMP
JA15
AKN7008-
MIC IN
C501 1/50
R501 10K
R502 10K
C512 0.047
V-6S
R503 6.8K
C503 220P
R504 270K
C502 1/50
NJM4558M-D-TFJ
IC501 (1/2)
C511 0.047
VR501
VCS1021-
C504 1/50
C520 0.047
C505 1/50
R505 4.7K
R506 47K
C506 2200P
IC501 (2/2)
NJM4558M-D-TFJ
C507 0.015
R507 3.9K
R508 3.3K
C508 1/50
C509 1/50
R509 100K
GNDA
J72
D20PWY0725E
LOUT
L IN
HP L
GND
HP R
R IN
ROUT
TO AF ASSY (2/2) CN22 (➡SCH-6)
L591 *1 18μ
JA14
AKN7005
HEADPHONE OUT
*1 (L591): DDXJ, DDXJ/NC, YPWXJ Only
V401
AAV7023
FL SPACER: AEB7017-
FL PIN GUIDE: 51048-0900
C401 0.047
C402 0.047
BD
CN73
52044-2845
FLAC1
FLAC2
GNDD
S12
S13
S14
S15
S16
G1
S11
S10
S9
S8
S7
S6
S5
S4
S3
S2
S1
G2
G3
G4
G5
G6
G7
KR4
HOOD
D401
D405
DISC SEL− S402
D404
D403
DISC SEL+ S401
D402
S401, S402: ASG1034
TO AF ASSY (2/2) CN23 (➡SCH-6)
J24
D20PWW0310E
S801
DSG1015
GNDD
HOOD
GNDD

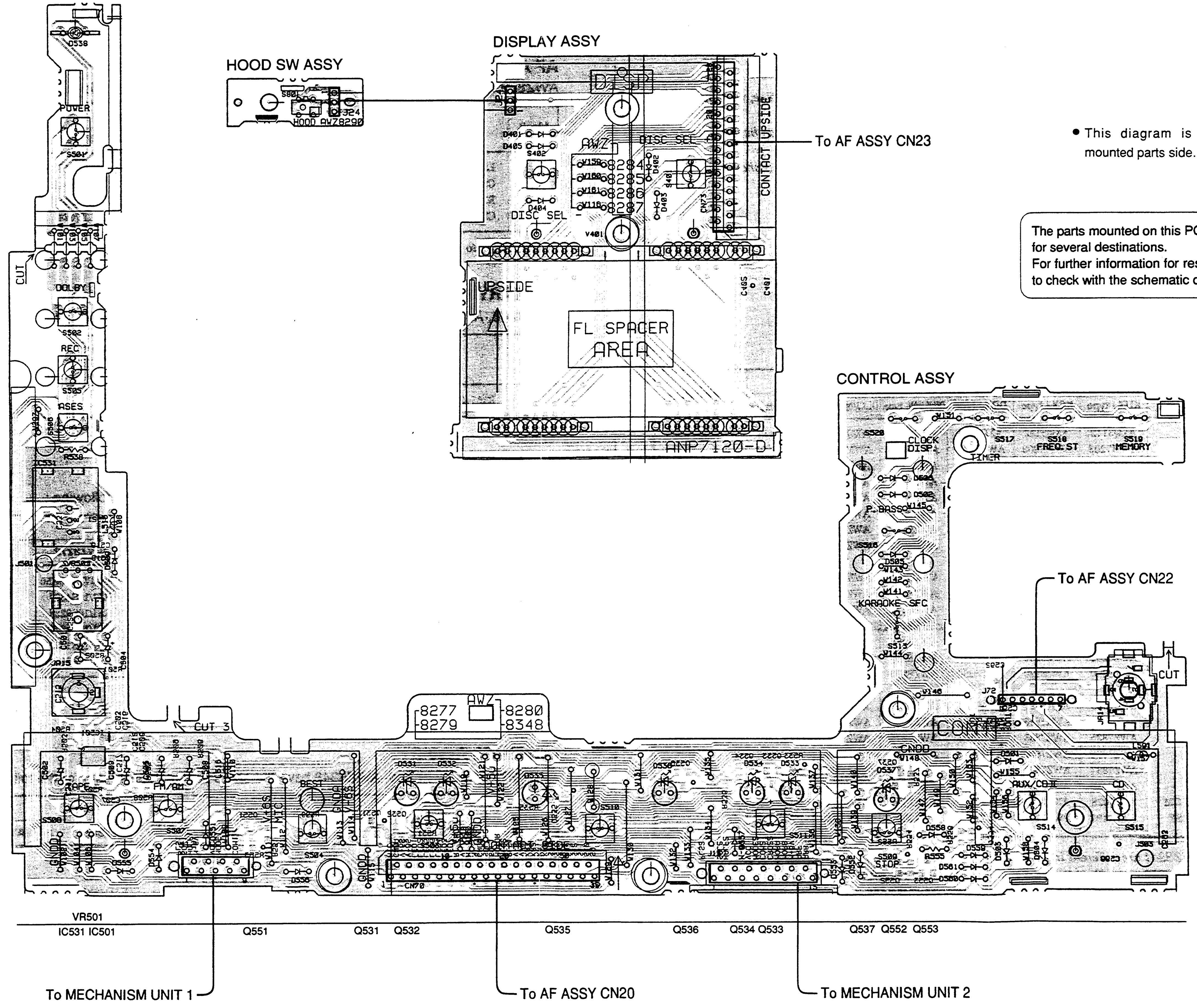
DISPLAY ASSY
(AWZ8284: KUXJ, KCXJ)
(AWZ8286: DDXJ, DDXJ/NC
: DLXJ/NC, YPWXJ)

CONTROL ASSY
(AWZ8277: KUXJ, KCXJ)
(AWZ8279: DDXJ, DDXJ/NC
: YPWXJ)
(AWZ8348: DLXJ/NC)

HOOD SW ASSY
(AWZ8290)

Note)
If the parts are not identified, the followings are used.
1SS254-T

SIGNAL ROUTE
(M) ➡ : MIC AUDIO SIGNAL
➡ : AUDIO SIGNAL


DISPLAY ASSY
HOOD SW ASSY
HOOD AWZ8290
To AF ASSY CN23
CONTACT UPSIDE
DISC SEL
UPSIDE
FL SPACER AREA
ANP7120-D
CONTROL ASSY
CLOCK DISP.
TIMER
FREQ.ST
MEMORY
P.BASS
KARAOKE SFC
To AF ASSY CN22
CUT
POWER
DOLBY
REC
ASES
CUT 3
8277
8279
AWZ
8280
8348
AUX/CD II
CD
STOP
CN70
VR501
IC531 IC501
Q551
Q531 Q532
Q535
Q536
Q534 Q533
Q537 Q552 Q553
To MECHANISM UNIT 1
To AF ASSY CN20
To MECHANISM UNIT 2

- This diagram is viewed from the mounted parts side.

The parts mounted on this PCB include all necessary parts for several destinations.
For further information for respective destinations, be sure to check with the schematic diagram.

5. PCB PARTS LIST

NOTES :

- *Parts marked by* " NSP " *are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by " ● " are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex. 1 *When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).*

$560\,\Omega \rightarrow 56 \times 10^1 = 561$ .... *RD1/4PU* $\boxed{5}\boxed{6}\boxed{1}$ *J*
$47k\,\Omega \rightarrow 47 \times 10^3 = 473$ .... *RD1/4PU* $\boxed{4}\boxed{7}\boxed{3}$ *J*
$0.5\,\Omega \rightarrow 0R5$ .... *RN2H* $\boxed{0}\boxed{R}\boxed{5}$ *K*
$1\,\Omega \rightarrow 1R0$ .... *RS1P* $\boxed{1}\boxed{R}\boxed{0}$ *K*

Ex. 2 *When there are 3 effective digits (such as in high precision metal film resistors).*

$5.62k\,\Omega \rightarrow 562 \times 10^1 = 5621$ .... *RN1/4PC* $\boxed{5}\boxed{6}\boxed{2}\boxed{1}$ *F*

■ LIST OF WHOLE PCB ASSEMBLIES

Mark	Symbol & Description	Part No.						Remarks
		KUXJ type	KCXJ type	DDXJ type	DDXJ/NC type	DLXJ/NC type	YPWXJ type	
	FM/AM TUNER MODULE	AXQ3112	AXQ3112	AXQ3112	AXQ3112	AXQ3112	AXQ3112	
NSP	MAIN ASSY	AWM7203	AWM7203	AWM7205	AWM7205	AWM7225	AWM7221	
	├AF ASSY	AWZ8232	AWZ8232	AWZ8234	AWZ8234	AWZ8234	AWZ8234	
	├AMP ASSY	AWZ8239	AWZ8239	AWZ8241	AWZ8241	AWZ8241	AWZ8241	*1
	├REG ASSY	AWZ8246	AWZ8246	AWZ8246	AWZ8246	AWZ8246	AWZ8246	
NSP	├PRIMARY ASSY	AWZ8248	AWZ8248	AWZ8250	AWZ8250	AWZ8346	AWZ8251	
NSP	├SECONDARY ASSY	AWZ8255	AWZ8255	AWZ8257	AWZ8257	AWZ8257	AWZ8257	*2
NSP	└RELAY ASSY	AWZ8262	AWZ8262	AWZ8262	AWZ8262	AWZ8262	AWZ8262	
NSP	COMP ASSY	AWM7210	AWM7210	AWM7212	AWM7212	AWM7222	AWM7212	
	├GM–CD ASSY	AWZ8263	AWZ8263	AWZ8265	AWZ8265	AWZ8265	AWZ8265	*3
	├VR ASSY	AWZ8270	AWZ8270	AWZ8272	AWZ8272	AWZ8272	AWZ8272	
	├CONTROL ASSY	AWZ8277	AWZ8277	AWZ8279	AWZ8279	AWZ8348	AWZ8279	
	├DISPLAY ASSY	AWZ8284	AWZ8284	AWZ8286	AWZ8286	AWZ8286	AWZ8286	*4
NSP	├HOME SW ASSY	AWZ8288	AWZ8288	AWZ8288	AWZ8288	AWZ8288	AWZ8288	
NSP	└HOOD SW ASSY	AWZ8290	AWZ8290	AWZ8290	AWZ8290	AWZ8290	AWZ8290	
NSP	GM MECHA ASSY	AXA7026	AXA7026	AXA7026	AXA7026	AXA7026	AXA7026	
NSP	├LO MECHANISM BOARD ASSY	AWX7013	AWX7013	AWX7013	AWX7013	AWX7013	AWX7013	
NSP	│ ├MECHA PCB ASSY	AWZ7835	AWZ7835	AWZ7835	AWZ7835	AWZ7835	AWZ7835	
NSP	│ ├SENSOR PCB ASSY	AWZ7836	AWZ7836	AWZ7836	AWZ7836	AWZ7836	AWZ7836	
NSP	│ ├MOTOR PCB ASSY	AWZ7837	AWZ7837	AWZ7837	AWZ7837	AWZ7837	AWZ7837	
NSP	│ └SW PCB ASSY	AWZ7838	AWZ7838	AWZ7838	AWZ7838	AWZ7838	AWZ7838	
NSP	└SERVO MECHANISM ASSY GM	AXA7028	AXA7028	AXA7028	AXA7028	AXA7028	AXA7028	
NSP	└MECHANISM BOARD ASSY	PWX1192	PWX1192	PWX1192	PWX1192	PWX1192	PWX1192	

*Note *1: Although AWZ8239 and AWZ8241 are different in part number, they have the same service parts.*
*Note *2: Although AWZ8255 and AWZ8257 are different in part number, they have the same service parts.*
*Note *3: Although AWZ8263 and AWZ8265 are different in part number, they have the same service parts.*
*Note *4: Although AWZ8284 and AWZ8286 are different in part number, they have the same service parts.*

■ CONTRAST OF PCB ASSEMBLIES

AF Assy

AWZ8232 and AWZ8234 have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ8232	AWZ8234	
	L3201	Not used	LAU221J	*
	C3201	Not used	CKSQYF104Z50	*
	R2019	RS/10S331J	RS1/10S201J	
	CN10	AKE7023	AKE7024	

*Note *: Refer to SCH–6.*

PRIMARY Assy

AWZ8248, AWZ8250, AWZ8346 and AWZ8251 and have the same construction except for the following :

Mark	Symbol & Description	Part No.				Remarks
		AWZ8248	AWZ8250	AWZ8346	AWZ8251	
	R101 (2.2MΩ, 1/2W)	ACN–208	Not used	Not used	Not used	

VR Assy

AWZ8270 and AWZ8272 have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ8270	AWZ8272	
	C705, C706	Not used	CKSQYB153K50	*
	R703, R704	RS1/10S000J	RS1/10S432J	
	R705, R706	RS1/10S104J	RS1/10S223J	
	R707, R708	RS1/10S682J	RS1/10S432J	
	R709, R710	RS1/10S123J	RS1/10S103J	
	R711, R712	RS1/10S392J	RS1/10S562J	

*Note *: Refer to SCH–6.*

CONTROL Assy

AWZ8277, AWZ8279 and AWZ8348 have the same construction except for the following:

Mark	Symbol & Description	Part No.			Remarks
		AWZ8277	AWZ8279	AWZ8348	
	D501	1SS254	Not used	Not used	
	L515	LAU120J	LAU120J	Not used	
	L591	Not used	LAU180J	Not used	*
	C518	CKSQYB222K50	CKSQYB222K50	Not used	

*Note *: Refer to SCH–6.*

■ PCB PARTS LIST

● Parts List for XR–P260F/KUXJ

FM/AM TUNER MODULE

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC6201		LA1836M
	IC6202		LM7001J
	Q6102		2SC2223
	Q6203		2SC2235
	Q6202		2SC2712
	Q6103, Q6214		2SC2714
	Q6201		2SK208
	Q6104		2SK302
	Q6101		3SK194
	Q6204		XDA124EK
	Q6217		XDC124EK
	D6101, D6102		1T33

COILS AND FILTERS

Mark	No.	Description	Parts No.
	L6104		ATC1003
	L6101		ATC1020
	L6102		ATC1021
	T6101		ATE–063
	L6207 (10.7MHz)		ATE1013
	F6203, F6204		ATF–119
	F6101		ATF–155
	F6202 (450kHz)		ATF1155
	L6103 (2.2μH)		ATH1043
	L6202, L6203, L6208		LCTA2R2J3225

CAPACITORS

Mark	No.	Description	Parts No.
	C6202, C6234, C6236 (1μF/16V)		ACG1051
	C6107		CCSCH010C50
	C6229		CCSCH821J50
	C6110		CCSQCH020C50
	C6101		CCSQCH050C50
	C6108, C6203, C6268		CCSQCH101J50
	C6111, C6116, C6208, C6221, C6222		CCSQCH150J50
	C6115		CCSQCH330J50
	C6114		CCSQRH080D50
	C6113		CCSQRH180J50
	C6105		CCSQTH150J50
	C6261		CEAS010M50
	C6224, C6246, C6262		CEAS100M50
	C6227		CEAS101M10
	C6216, C6217		CEAS330M16
	C6231, C6233		CEAS3R3M50
	C6219		CEAS470M10
	C6243–C6245		CEAS470M16
	C6238		CEJA100M16
	C6249, C6250		CEJA4R7M35
	C6215		CFTXA103J50
	C6214		CFTXA224J50
	C6103, C6106, C6112, C6204		CKSQYB102K50
	C6102, C6109, C6117, C6210, C6264		CKSQYB103K50
	C6213		CKSQYB223K50
	C6230		CKSQYB333K50
	C6228, C6252		CKSQYB472K50
	C6209, C6237, C6265, C6267		CKSQYB473K50
	C6212, C6218		CKSQYF103Z50
	C6220, C6226, C6239, C6242, C6255		CKSQYF223Z50
	C6235		CKSQYF224Z25
	C6225, C6241, C6266		CKSQYF473Z50
	C6232		CKSYB333K50
	C6251		CKSYB472K50
	C6223		CKSYF103Z50
	C6263		CKSYF473Z50

RESISTORS

Mark	No.	Description	Parts No.
	R6299, R6300		RD1/8PM102J
	R6113, R6116, R6118, R6268–R6271		RS1/8S000J
	R6275, R6276, R6278, R6283, R6284		RS1/8S000J
	R6290, R6293, R6294, R6297		RS1/8S000J
	R6243, R6244		RS1/8S101J
	R6211		RS1/8S103J
	R6237		RS1/8S182J
	R6209		RS1/8S221J
	R6239		RS1/8S332J
	R6101		RS1/8S470J
	VR6201 (10kΩ)		ACP1056
	VR6202		VRTB6VS223
	Other Resistors		RS1/10S□□□J

OTHERS

Mark	No.	Description	Parts No.
	BN6201	TERMINAL 4–P	AKA1016
	X6203	CRYSTAL RESONATOR	ASS1042
	X6201	CRYSTAL RESONATOR	ASS1066
	X6202	CERAMIC RESONATOR	ATF1027
		AM RF TUNING BLOCK	AXX1025
	CN6201	14P SOCKET	KP200IA14L

AF ASSY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC2001		BU4052BCF
	IC4202		BU4066BCF
	IC4421		CXA1101P
⚠	IC101		ICP–N50
	IC2004, IC4101, IC4301		NJM4558M–D
	IC3001		PDG164A
	IC2002		PM0006A
	Q1006, Q2201, Q2303		2SA1162
⚠	Q1001		2SA965
	Q1003, Q1007, Q1009, Q1013		2SB1197K
	Q4356		2SC2240
	Q1010, Q2202, Q2203, Q2301, Q2302		2SC2712
	Q3101, Q4301, Q4302, Q4451–Q4454		2SC2712
	Q1004, Q4353, Q4354		2SD1781K
	Q2003, Q2004		2SD2114K
	Q4355		2SD2144S
	Q4307, Q4308		2SK373
	Q2206		DTA124EK
	Q3001, Q3004		DTA143EK
	Q2204, Q2205, Q4455		DTC124EK
	Q4203, Q4204		DTC124TKA
	Q1005, Q1008, Q3002, Q3003, Q4207		DTC143EK
	D3013		1SR35–100A
	D1005, D1020–D1022, D2004, D2005		1SS254
	D2201, D2301, D2303, D2304		1SS254
	D3001–D3005, D3011, D3012		1SS254
	D3014–D3022, D3101, D4201		1SS254
	D4301–D4306, D4401–D4404		1SS254
	D4551, D4552		1SS254
⚠	D1002		D2SBA20 (B)
⚠	D1001		D3SBA20 (B)
	D2202, D2203		MTZJ12C
	D1006		MTZJ22D
	D2306		MTZJ27B
	D2302, D2305		MTZJ4.3C

Mark	No.	Description	Parts No.
	D1007		MTZJ5.1B
⚠	D1003, D1004		S5688G
	D1008–D1015		S5688G
⚠	D1019		S5688G
COILS AND FILTERS			
	L2101, L2102 (1μH)		ATH–133
	L3001		LAU220J
	L4301, L4302		LTA472J
	L4303, L4304		LTA822J
	L4351 (4.05μH)		RTD1065
	F4401, F4402		RTF1208
SWITCHES AND RELAYS			
	RY1001		ASR7001
CAPACITORS			
⚠	C1001, C1002 (0.01μF/150V)		ACG1005
	C1006 (0.01μF/150V)		ACG1005
⚠	C1007, C1008 (3300μF/56V)		ACH7006
	C3003		ACH7013
	C4319, C4320		CCCSL271K500
	C4323, C4324		CCSQCH100D50
	C3010, C3011		CCSQCH101J50
	C4101, C4102		CCSQCH471J50
	C4151, C4152		CCSQCH681J50
	C4191, C4192		CCSQSL470J50
	C3016		CEANP3R3M50
	C2301, C2302, C3101, C3102		CEAS010M50
	C4303, C4304, C4451, C4452		CEAS010M50
	C1021		CEAS100M16
	C2202, C3001, C4360, C4403–C4405		CEAS100M50
	C4407, C4454		CEAS100M50
	C4401, C4408		CEAS101M10
	C4453		CEAS220M16
	C1011		CEAS220M35
	C2201		CEAS221M10
⚠	C1009, C1020		CEAS221M16
⚠	C1010		CEAS221M63
⚠	C1012, C1013		CEAS222M25
	C2037–C2042, C4315, C4316		CEAS2R2M50
	C3006, C4103, C4104, C4309, C4310		CEAS330M16
	C4317, C4318		CEAS330M16
	C4107, C4108, C4352, C4357, C4358		CEAS470M10
⚠	C1019		CEAS471M35
	C2003, C2004, C4207, C4208		CEAS4R7M50
	C4301, C4302		CEAS4R7M50
	C4402, C4406		CEASR68M50
	C4361		CKCYB681K500
	C2101–C2104, C4501–C4503		CKCYF473Z50
	C2005, C2013, C3103		CKSQYB102K50
	C4411, C4412		CKSQYB152K50
	C4313, C4314		CKSQYB182K50
	C4307, C4308		CKSQYB273K50
	C4353, C4354		CKSQYB332K50
	C3005, C4355		CKSQYB472K50
	C2043		CKSQYB473K50
	C2014		CKSQYB562K50
	C4105, C4106		CKSQYB682K50
	C2011, C2012		CKSQYB822K50
	C4311, C4312		CKSQYB823K25
	C3002, C3004, C3007, C3008		CKSQYF103Z50

Mark	No.	Description	Parts No.
	C2008–C2010, C3017, C3018		CKSQYF104Z50
	C4409, C4410		CQMA103J50
	C4356		CQMA223J50
	C2006, C2007		CQMA683J50
	C4359		CQPA822J100
RESISTORS			
	R2306		RD1/2PM330J
	R1004		RD1/2PM332J
	R4353		RD1/2PM470J
	R2103, R2104		RD1/2PMFL101J
	R2105, R2106		RD1/4PM4R7J
	R1023		RD1/4PMF010J
	R1008, R1015, R1016		RD1/6PM102J
	R4325, R4326		RD1/6PM103J
	R1010		RD1/6PM222J
	R1003		RD1/6PM332J
	R1020		RD1/6PM471J
	R4357		RD1/6PM4R7J
	R4354		RD1/6PM682J
	R4113, R4114, R4323, R4324		RD1/6PM820J
	R2305		RS2LMF151J
	R2101, R2102		RS2LMF331J
	R1001, R1002		RS2LMFR22J
	R2210		RS3LMF431J
	R1018		RS3LMF680J
	VR4901 (2.2kΩ)		RCP1019
	VR4201–VR4204 (22kΩ)		RCP1046
	VR4301, VR4302 (4.7kΩ)		RCP1139
	VR4351, VR4352 (470kΩ)		RCP1143
	Other Resistors		RS1/10S□□□J
OTHERS			
	CN17	19P FFC CONNECTOR	52045–1945
	CN23	28P FFC CONNECTOR	52045–2845
	CN20	35P FFC CONNECTOR	52045–3545
	CN22	7P JUMPER CONNECTOR	52147–0710
	CN11	13P JUMPER CONNECTOR	52147–1310
	JA11	AUDIO 2P PIN JACK	AKB7043
	CN10	SPEAKER TERMINAL 4–P	AKE7023
	CN4003	2P TOP POST	B2B–EH
	CN4002	3P TOP POST	B3B–EH
	CN4001	3P TOP POST(RED)	B3B–EH–R
	J3001	BOARD–IN WIRE	DB020ND0
	X3001 (8.00MHz)		DSS1053
	JA13	REMOTE CONTROL JACK	RKN1004
	CN16, CN19	CONNECTOR (12P)	TUC–P12P–B1
		PCB BINDER	VEF1008
	JA12	2P PIN JACK	VKB1050

AMP ASSY

SEMICONDUCTORS			
⚠	IC302		ICP–N10
⚠	IC301		STK4192–2GP
CAPACITORS			
	C315		CEANP220M50
	C313		CEANP470M50
	C301, C302, C311, C312, C314		CEAS100M50
	C309, C310		CEAS101M25
	C307, C308		CEAS101M50
	C303, C304		CKSQYB272K50
	C351		CKSQYB473K50

RESISTORS

Mark	No.	Description	Parts No.
	R311–R314		RD1/2PM332J
	R307, R308		RD1/4PM561J
	R309, R310		RD1/4PM563J
	R352		RD1/4PMF010J
	R315, R317		RD1/4PMFL101J
	R318, R320		RD1/4PMFL222J
	R319		RD1/4PMFL471J
	R316		RS1LMF102J
	Other Resistors		RS1/10S□□□J

OTHERS

Mark	No.	Description	Parts No.
	TH351	THERMISTOR	AEX7002

REG ASSY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
⚠	IC601		NJM7805FA
⚠	IC603		NJM78M12FA
⚠	IC602		NJM7906FA
	D601		MTZJ7.5A

CAPACITORS

Mark	No.	Description	Parts No.
	C611–C613		CEAS100M16
	C601–C603		CKSQYF104Z50

RESISTORS

Mark	No.	Description	Parts No.
	All Resistors		RS1/10S□□□J

PRIMARY ASSY

RESISTORS

Mark	No.	Description	Parts No.
⚠	R101 (2.2MΩ, 1/2W)		ACN–208

SECONDARY ASSY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
⚠	IC1003		ICP–N50

RELAY ASSY

OTHERS

Mark	No.	Description	Parts No.
	CN29	14P PLUG	KM200IA14
	CN66	12P CONNECTOR	TUC–P12X–B1

GM–CD ASSY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC8151		CXA1372Q
	IC8301		CXD2508AQ
⚠	IC8201, IC8202		LA6520
	IC8401		NJM4558M–D
	IC8001		PD4664A
	Q8401, Q8402		2SD2114K
	Q8301		2SK246
	Q8302		DTA124EK
	Q8403, Q8404		DTA143EK
	D8001, D8002, D8301, D8302		1SS254
	D8401, D8402		DAN202K

COILS AND FILTERS

Mark	No.	Description	Parts No.
	L8321		LAU1R2J
	L8001		LAU220J

CAPACITORS

Mark	No.	Description	Parts No.
	C8322		CCSQCH100D50
	C8006, C8007, C8350, C8351		CCSQCH101J50
	C8407–C8410		CCSQCH121J50
	C8323		CCSQCH220J50
	C8403–C8406		CCSQCH271J50
	C8401, C8402		CCSQCH391J50
	C8411, C8412		CEANP2R2M50
	C8004		CEAS101M10
	C8301		CEAS330M16
	C8165, C8166		CEAS4R7M50
	C8309		CEASR47M50
	C8302, C8303		CGCYX104M16
	C8008, C8009, C8162, C8321		CKSQYB102K50
	C8152, C8157, C8160		CKSQYB103K50
	C8306		CKSQYB152K50
	C8352		CKSQYB223K50
	C8161		CKSQYB332K50
	C8151, C8159		CKSQYB333K50
	C8163		CKSQYB472K50
	C8002, C8003, C8307		CKSQYB473K50
	C8164		CKSQYB561K50
	C8158, C8203–C8209, C8308		CKSQYF103Z50
	C8153–C8156, C8167, C8420, C8421		CKSQYF104Z50

RESISTORS

Mark	No.	Description	Parts No.
	R8013–R8015		RD1/6PM102J
	R8030		RD1/6PM103J
	R8210, R8211		RD1/6PM104J
	R8012		RD1/6PM472J
	R8020, R8021, R8024		RD1/6PM473J
	R8039		RD1/6PM563J
	R8901		RS1/8S000J
	R8017		RS1/8S102J
	VR8151, VR8152 (22kΩ)		RCP1103
	Other Resistors		RS1/10S□□□J

OTHERS

Mark	No.	Description	Parts No.
	CN67	19P FFC CONNECTOR	52045–1945
	CN8002	22P FFC CONNECTOR	52045–2245
	CN8201	6P SIDE POST	VKN–004
	X8301 (33.8688MHz±700ppm)		ASS7000
	X8001 (4.19MHz)		VSS1014

VR ASSY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC701		NJM4558M–D
	Q703, Q704		2SA1162
	Q705, Q706		2SC2712

CAPACITORS

Mark	No.	Description	Parts No.
	C717		CEAS100M50
	C707, C708		CEAS2R2M50
	C721, C722		CEASR47M50
	C711, C712, C715, C716, C718		CKSQYF104Z50
	C720		CKSQYF104Z50

RESISTORS

Mark	No.	Description	Parts No.
	VR701 (50K–B × 2)		ACX7019
	Other Resistors		RS1/10S□□□J

OTHERS

Mark	No.	Description	Parts No.
	CN69	12P CONNECTOR	TUC–P12X–B1

CONTROL ASSY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC501		NJM4558M-D
	Q554		2SB1197K
	Q551, Q552		2SD1781K
	Q553		DTC124EK
	Q531–Q537		DTC143EK
	D501, D503–D506, D509		1SS254
	D551–D561		1SS254
	D538		GL1PR21
	D537		MAA5064X
	D531–D536		MPG5064X

COILS AND FILTERS

Mark	No.	Description	Parts No.
	L515		LAU120J

SWITCHES AND RELAYS

Mark	No.	Description	Parts No.
	S501–S511, S513–S520		ASG1034

CAPACITORS

Mark	No.	Description	Parts No.
	C503		CCSQCH221J50
	C501, C502, C504, C505		CEJA010M50
	C508, C509		CEJA010M50
	C507		CKSQYB153K50
	C506, C518		CKSQYB222K50
	C531		CKSQYF103Z50
	C511, C512, C520		CKSQYF473Z50

RESISTORS

Mark	No.	Description	Parts No.
	R555		RD1/6PM122J
	R538		RD1/6PM221J
	VR501(10kΩ)		VCS1021
	Other Resistors		RS1/10S□□□J

OTHERS

Mark	No.	Description	Parts No.
		9P CABLE HOLDER	51048–0905
		15P CABLE HOLDER	51063–1505
	CN70	35P FFC CONNECTOR	52045–3545
	JA14	MINITURE JACK	AKN7005
	JA15	MINI JACK	AKN7008
	J12	JUMPER WIRE	D15A09–075–2468
		REMOTE RECEIVER UNIT	GP1U58X

DISPLAY ASSY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	D401–D405		1SS254

SWITCHES AND RELAYS

Mark	No.	Description	Parts No.
	S401, S402		ASG1034

CAPACITORS

Mark	No.	Description	Parts No.
	C401, C402		CKSQYF473Z50

OTHERS

Mark	No.	Description	Parts No.
		FL PIN GUIDE	51048–0900
	CN73	28P FFC CONNECTOR	52044–2845
	V401	FL TUBE	AAV7023
		FL SPACER	AEB7017

HOME SW ASSY

SWITCHES AND RELAYS

Mark	No.	Description	Parts No.
	S951		DSG1016

HOOD SW ASSY

SWITCHES AND RELAYS

Mark	No.	Description	Parts No.
	S801		DSG1015

OTHERS

Mark	No.	Description	Parts No.
	J24	3P JUMPER WIRE	D20PWW0310E

MECHA PCB ASSY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	Q651		DTC124ES
	D651		VRPG5615S

RESISTORS

Mark	No.	Description	Parts No.
	R652 (10kΩ)		ACN7011
	R651 (56kΩ)		ACN7012
	R653 (220Ω, 1/6W)		DCN1062
	R654 (0Ω)		DCN1065

OTHERS

Mark	No.	Description	Parts No.
	CN652	12P FFC CONNECTOR	12FMZ–AST
	CN651	4P MT CONNECTOR	173979–4
	CN653	22P FFC CONNECTOR	SLEM22R–2

SENSOR PCB ASSY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	D652		GP1S24

OTHERS

Mark	No.	Description	Parts No.
	J652	3P JUMPER WIRE	D20PWW0315E

MOTOR PCB ASSY

OTHERS

Mark	No.	Description	Parts No.
		LOADING MOTOR	VXM1034

SW PCB ASSY

SWITCHES AND RELAYS

Mark	No.	Description	Parts No.
	S651, S652		VSG1006

OTHERS

Mark	No.	Description	Parts No.
	J656	3P JUMPER WIRE	D20PWW0315E

MECHANISM BOARD ASSY

SWITCHES AND RELAYS

Mark	No.	Description	Parts No.
	S610		DSG1016

OTHERS

Mark	No.	Description	Parts No.
	CN610	4P MT CONNECTOR	173979–4

6. ADJUSTMENTS

6.1 TUNER SECTION

■ FM Tuner Section

- Set the mode selector to FM BAND.
- Connect the wiring as shown in Fig. 1–1.

Step No.	Adjustment Title	FM SG (1kHz, ±75kHz dev.)		Reception Frequency Display	Adjustment Location	Specifications
		Frequency (MHz)	Level (dBμV)			
1	Center Adjustment	98 Non modulation	80 or more	—	L6207	Adjust so that the DC voltage between IC6201-Pin 4 and Pin 28 (or ⊕ leads of C6224 and C6261) becomes 0V±50mV.
2	Front End Sensitivity	98	10-30	98MHz	L6102 T6101	Adjust so that the DC voltage between the IC6201-Pin 12 and GND (or ⊕ leads of C6238 and GND) becomes at maximum level.
3	Stereo Distortion	98	80	98MHz	T6101	Minimize the distortion with 1/8 rotation of the core.
4	TUNED IND. Lighting Level	98	15±2	98MHz	VR6201	Adjust so that the indicator of TUNED IND. starts to light up.

Notes:

- *Before adjusting, make sure there is no gap between L6101 and L6102. If there is a gap between them, bring them into contact with each other first, and then make adjustments.*
- *Make indicator adjustments in order of AM →FM.*

■ AM Tuner Section

- Set the mode selector to AM BAND.
- Connect the wiring as shown in Fig. 1–1.

Step No.	Adjustment Title	AM SG (400Hz, 30% Mod.)		Reception Frequency Display	Adjustment Location	Specifications
		Frequency (kHz)	Level (dBμV/m)			
1	TUNED IND. Lighting Level	999	47±2	999kHz*1	VR6202	Adjust so that the indicator of TUNED IND. starts to light up.

*1: For the area using 10kHz step, frequencies should be 1000 kHz

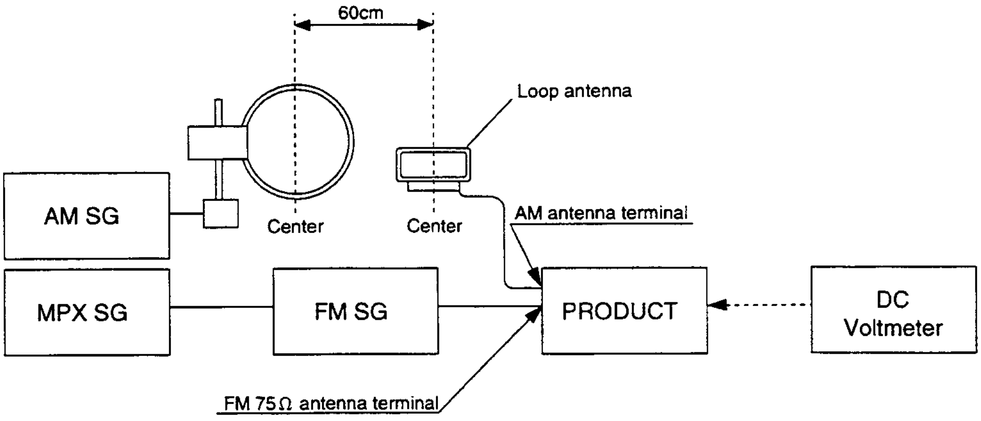


Fig. 1–1 AM and FM Adjustment Wiring Diagram

FM/AM TUNER MODULE (AXQ3112)

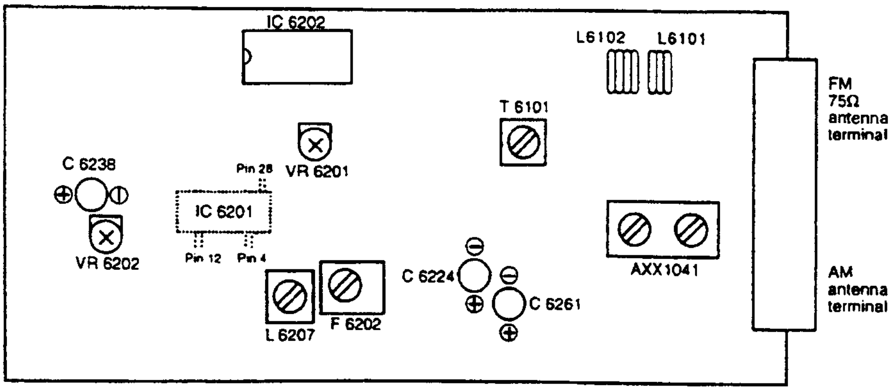

IC 6202
L6102
L6101
T 6101
FM
75Ω
antenna
terminal
C 6238
Pin 28
VR 6201
IC 6201
VR 6202
Pin 12
Pin 4
C 6224
C 6261
L 6207
F 6202
AXX1041
AM
antenna
terminal

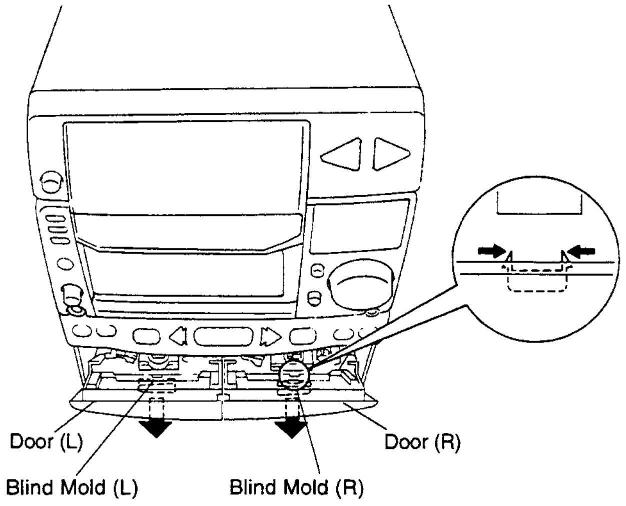
Fig. 1–2 Adjustment Points

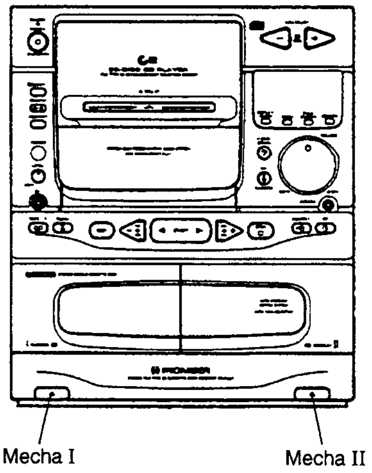
6.2 CASSETTE DECK SECTION

- Adjustment points and test points are shown in Fig. 2-3 and Fig. 2-4.

■ Before Adjustment

1. For execution of head angle adjustment, first remove the blind molds (L) and (R).
2. Open the cassette doors (L) and (R).
3. Insert your fingers into the cassette door, push down the two hooks at the upper side of the blind mold, and push them slightly out to the front. Excessive pushing at this time may make it impossible to close the cassette door.
4. Confirm that the blind molds (L) and (R) have been pushed out a little to the front, and then close the cassette doors (L) and (R) and remove the blind molds.


Door (L)
Door (R)
Blind Mold (L)
Blind Mold (R)


Mecha I
Mecha II

■ Mechanical Adjustment

- Test tape: STD-301 (3kHz, 30min).

1. Tape Speed Adjustment

No.	Mode	Test Tape	Adjusting Points	Measurement Points	Adjustment Procedure	Remarks
1	Deck I PLAY	STD-301 (Playback: 3kHz)	AF Assy VR4901	TAPE TEST POINT (Rch) (AF Assy)	Press the PLAY SW and adjust so that the reading becomes 3000Hz ±20Hz. Confirm that wow & flutter level is below 0.2% (in the reverse direction, confirm that the reading is within 3000Hz ±60Hz).	

■ Electrical Adjustment

Check the following before starting.

1. Confirm that the tape speed adjustment has been completed.
2. Clean the heads and demagnetize them using a head eraser.
3. Set the measurement level to 0 dBV = 1 Vrms.
4. Use the specified tape for adjustment. Use the labeled (A) side of the test tape.
   STD-331E: For playback adjustment
   STD-631or STD-632: Normal blank tape
5. Provide yourself with the following measuring devides:
   - AC millivoltmeter
   - Low-frequency oscillator
   - Attenuator
   - Oscilloscope
6. Adjust both right and left channels unless otherwise specified.
7. Turn the DOLBY NR switch off unless otherwize specified.
8. Warm up the unit for several minutes before adjustment. In particular, be sure to warm up the unit in the REC/PLAY mode for 3 to 5 minutes before starting recording/playback frequency characteristics adjustment.
9. Always follow the indicated adjustment order. Otherwise, a complete adjustment may not be achieved.

Playback Adjustment (Decks I and II)

1. Head Azimuth Adjustment
2. Playback Level Adjustment

Recording Adjustment (Deck II)

1. Bias Oscillation Frequency Adjustment
2. Recording Bias Adjustment
3. Recording Level Adjustment.
4. ALC Operation Check

* *As the reference recording level is 250nwb / m for STD-331E, the recording level will be higher by 4 dB for STD-331B (160nwb / m). When adjusting, pay carefull attention to the type of tape used.*

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
"DOLBY" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.

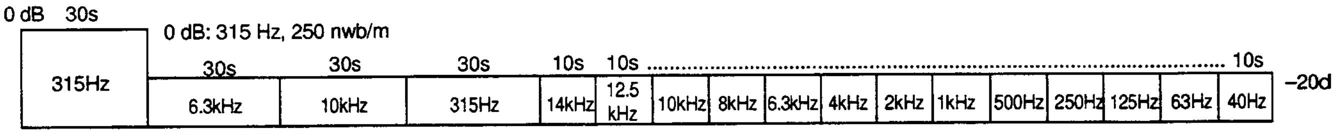

0 dB 30s
315Hz
0 dB: 315 Hz, 250 nwb/m
30s
6.3kHz
30s
10kHz
30s
315Hz
10s
14kHz
10s
12.5 kHz
10kHz
8kHz
6.3kHz
4kHz
2kHz
1kHz
500Hz
250Hz
125Hz
63Hz
10s
40Hz
−20dB

Fig. 2-1 STD-331E Test Tape

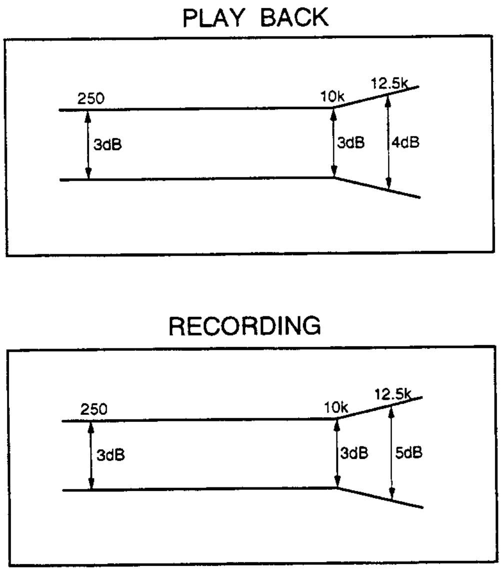


Fig. 2-2 Frequency Characteristics

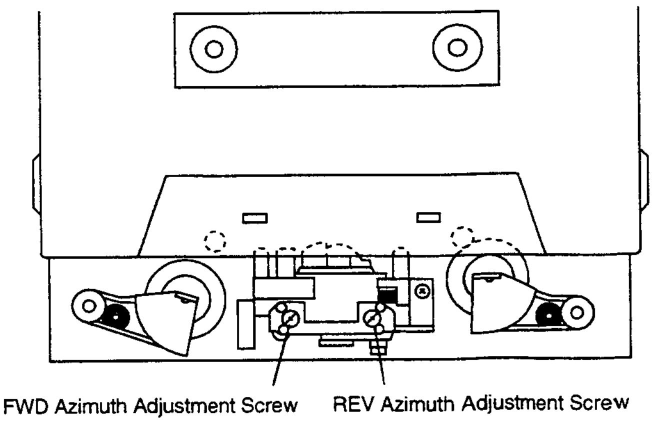

FWD Azimuth Adjustment Screw
REV Azimuth Adjustment Screw

Fig. 2-3 Head Azimuth Adjustment

■ Playback Adjustment

1. Head Azimuth Adjustment

- This unit is equipped with auto tape selector.
- Do not switch between forward and reverse operation with the screwdriver inserted.

Step	Tape Selector (AUTO)	Mode	Input Signal/ Test Tape	Adjusting Points		Measurement Points	Adjustment Value	Remarks
1	NORMAL	PLAY	STD-331E test tape (Playback: 10kHz, –20dB)	Deck I	Head azimuth adjustment screw (Fig. 2-3)	TAPE TEST POINT (L, Rch) (AF Assy)	Max. playback signal level	After adjustment, apply silicon bond to the head azimuth adjustment screw.
				Deck II				

2. Playback Level Adjustment

- Since this adjustment determines playback Dolby NR level, perform it carefully.

Step	Tape Selector (AUTO)	Mode	Input Signal/ Test Tape	Adjusting Points		Measurement Points	Adjustment Value	Remarks
1	NORMAL	PLAY	STD-331E test tape (Playback: 315Hz, 0dB)	Deck I	VR4203 (Lch) VR4204 (Rch)	TAPE TEST POINT (L, Rch) (AF Assy)	– 4.2 dBV	
				Deck II	VR4201 (Lch) VR4202 (Rch)			

Note: Please execute playback level adjustment always in the order of deck I → deck II.
When deck I has been adjusted, always adjust deck II also.

■ Recording Adjustment

1. Bias Oscillation Frequency Adjustment

Step	Tape Selector (AUTO)	Mode	Input Signal/ Test Tape	Adjusting Points		Measurement Points	Adjustment Value	Remarks
1	NORMAL	REC	Load the STD–631 or STD–632 test tape and set the recording mode.	Deck I	———	———	Oscillation frequency to be 105.0kHz ±2kHz.	When the power is turned ON while the MEMORY button is depressed, the frequency will decrease 2 – 3 kHz.
				Deck II	L4351	Between Ⓐ point in Fig. 2-4 and GND.		

2. Recording Bias Adjustment

- Since this adjustment affects recording bias, prevent distortion from increasing due to underbias.

Step	Tape Selector (AUTO)	Mode	Input Signal/Test Tape	Adjusting Points		Measurement Points	Adjustment Value	Remarks
1	NORMAL	REC	Input a 315Hz signal to the AUX/ CD II terminal and set the input selector to AUX/CD II.	Deck I	——	TAPE TEST POINT (L, Rch) (AF Assy)	– 24.2 dBV	
				Deck II	Input signal level			
2	NORMAL	REC→ PLAY	Load the STD-631 or STD-632 test tape and record/playback the 315Hz and 10kHz signals. (see the Note below)	Deck I	——	TAPE TEST POINT (L, Rch) (AF Assy)	Repeat adjustment until playback level of the 10kHz signal is within 0±0.5dB from that of the 315Hz signal.	
				Deck II	VR4351 (Lch) VR4352 (Rch)			

Note: Set the 10kHz input signal level to the same value as the 315Hz input signal level of step 1.

3. Recording Level Adjustment

Step	Tape Selector (AUTO)	Mode	Input Signal/Test Tape	Adjusting Points		Measurement Points	Adjustment Value	Remarks
1	NORMAL	REC	Input a 315Hz signal to the AUX/CD II terminal and set the input selector to AUX/CD II.	Deck I	Input signal level	TAPE TEST POINT (L, Rch) (AF Assy)	– 8.2 dBV	
				Deck II				
2	NORMAL	REC → PLAY	STD-631 or STD-632 test tape and record/playback the 315Hz signal.	Deck I	——	TAPE TEST POINT (L, Rch) (AF Assy)	Repeat recording, playback and adjustment until playback level of the 315Hz signal becomes -8.2dBV.	
				Deck II	VR4301 (Lch) VR4302 (Rch)			

4. ALC Operation Check

Step	Tape Selector (AUTO)	Mode	Input Signal/Test Tape	Adjusting Points	Measurement Points	Adjustment Value	Remarks
1	NORMAL	REC	Input a 315Hz signal to the AUX/CD II terminal and set the input selector to AUX/CD II.	Input signal level	TAPE TEST POINT (L, Rch) (AF Assy)	– 8.2 dBV	
2				Set to a level +10 dB above the input level at step 1.		Confirm that the reading is –3.2±2.5dBV.	

AF ASSY

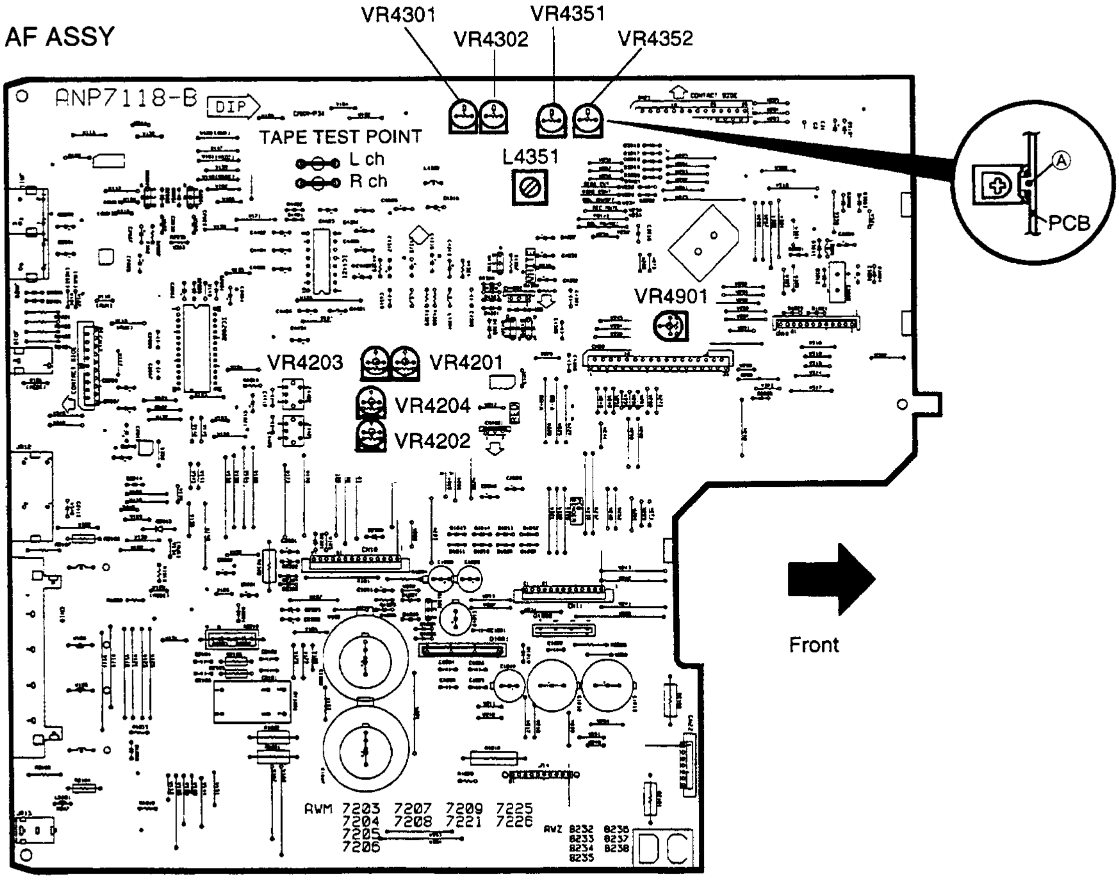
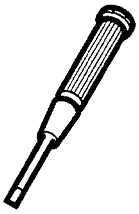
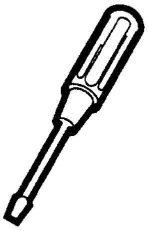
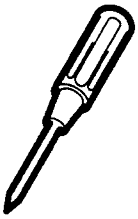
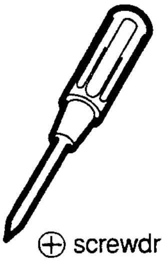
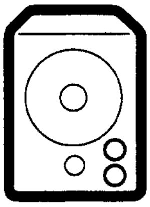
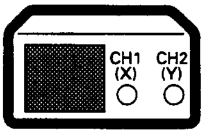
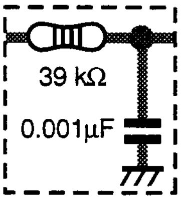

VR4301
VR4351
VR4302
VR4352
ANP7118-B
DIP
TAPE TEST POINT
L ch
R ch
L4351
Ⓐ
PCB
VR4901
VR4203
VR4201
VR4204
VR4202
Front
RWM 7203 7207 7209 7225
7204 7208 7221 7226
7205
7206
RWZ 8232 8236
8233 8237
8234 8238
8235
DC

Fig. 2–4 Adjustment and Measurement points

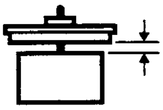
6.3 CD SECTION (CD部の調整)

1. PREPARATIONS (準備)

1.1 Jigs and Measuring Instruments (使用測定器/治工具類)

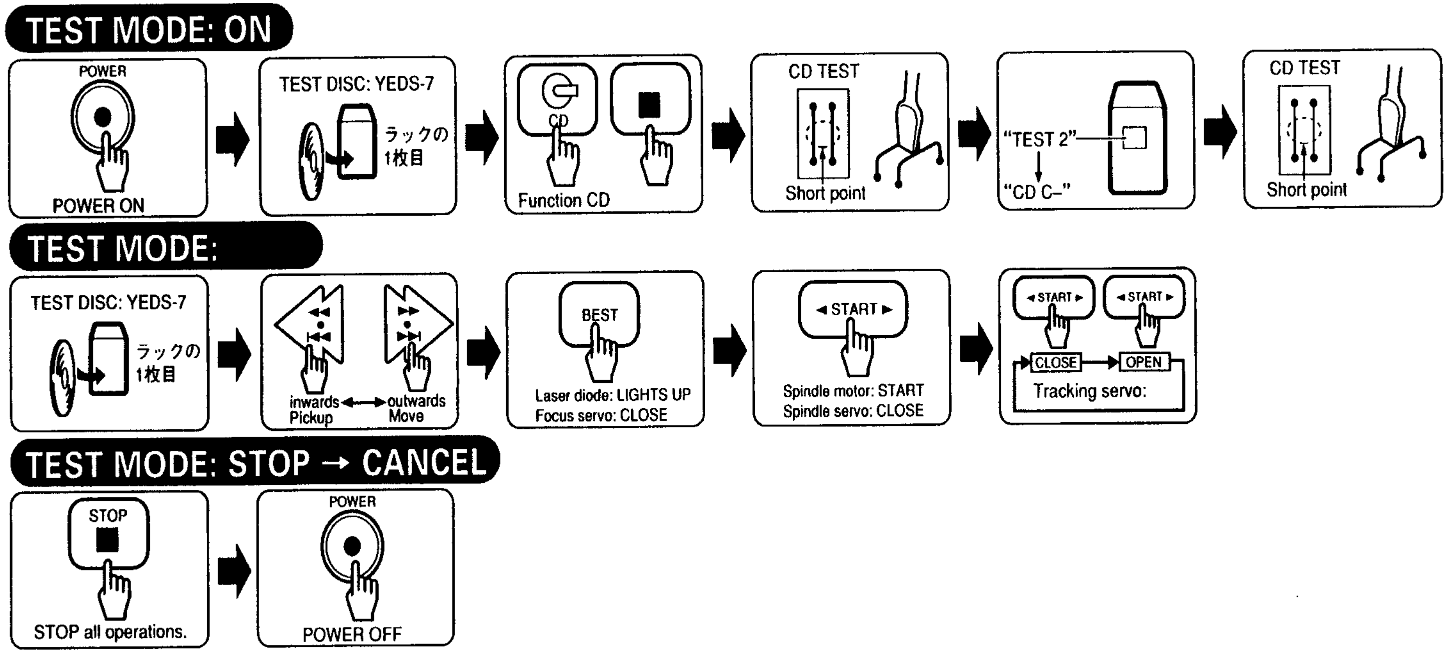
CD TEST DISC (YEDS-7)	 ⊖ Precise screwdriver	 ⊖ screwdriver (small)	 ⊕ screwdriver (medium)
 ⊕ screwdriver (large)	 Low-frequency oscillator	 Dual-trace oscilloscope (10 : 1 probe)	 Low pass filter (39 kΩ + 0.001µF)

1.2 Necessary Adjustment Points (調整に必要な項目)

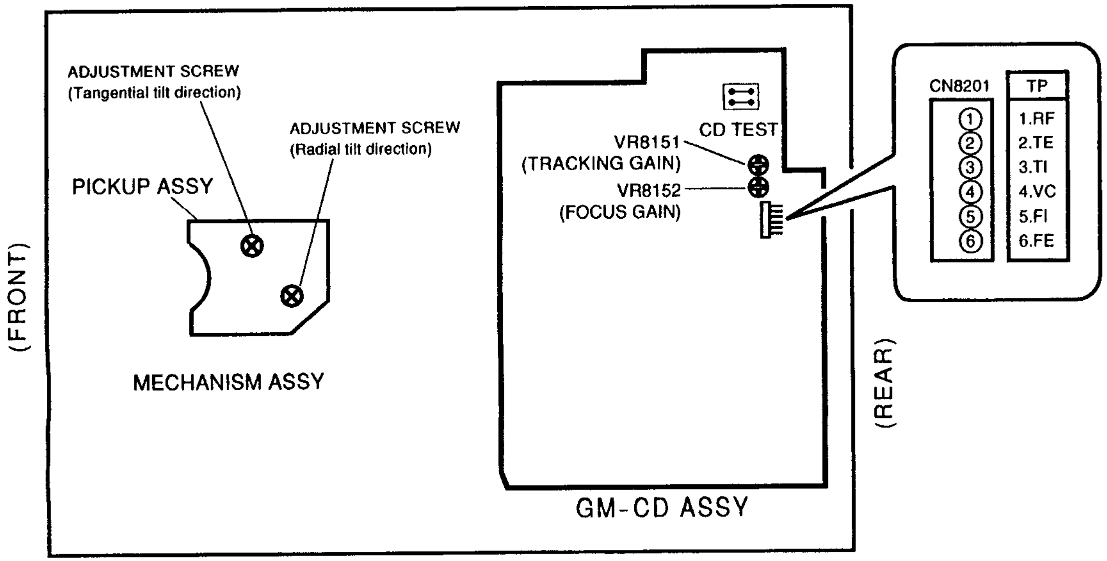
When (このような時)	Adjustment points
Exchange PICKUP (ピックアップを交換した時)	1.2.3.4.5.6. → Page 56~58
Exchange CD ASSY (CD ASSYを交換した時)	1.2.3.4.5.6. → Page 56~58
Exchange SERVO MECH ASSY (サーボメカ ASSYを交換した時)	1.2.3.4.5.6. → Page 56~58
Exchange SPINDLE MOTOR (スピンドルモーターを交換した時)	 ADJ → Page 12

2. ADJUSTMENT (調整)

2.1 How to Start/Cancel Test Mode （テストモ-ドの設定/解除）


TEST MODE: ON
POWER
POWER ON
TEST DISC: YEDS-7
ラックの
1枚目
CD
Function CD
CD TEST
Short point
"TEST 2"
"CD C–"
CD TEST
Short point
TEST MODE:
TEST DISC: YEDS-7
ラックの
1枚目
inwards ←→ outwards
Pickup Move
BEST
Laser diode: LIGHTS UP
Focus servo: CLOSE
◄START►
Spindle motor: START
Spindle servo: CLOSE
◄START►
◄START►
CLOSE
OPEN
Tracking servo:
TEST MODE: STOP → CANCEL
STOP
STOP all operations.
POWER
POWER OFF

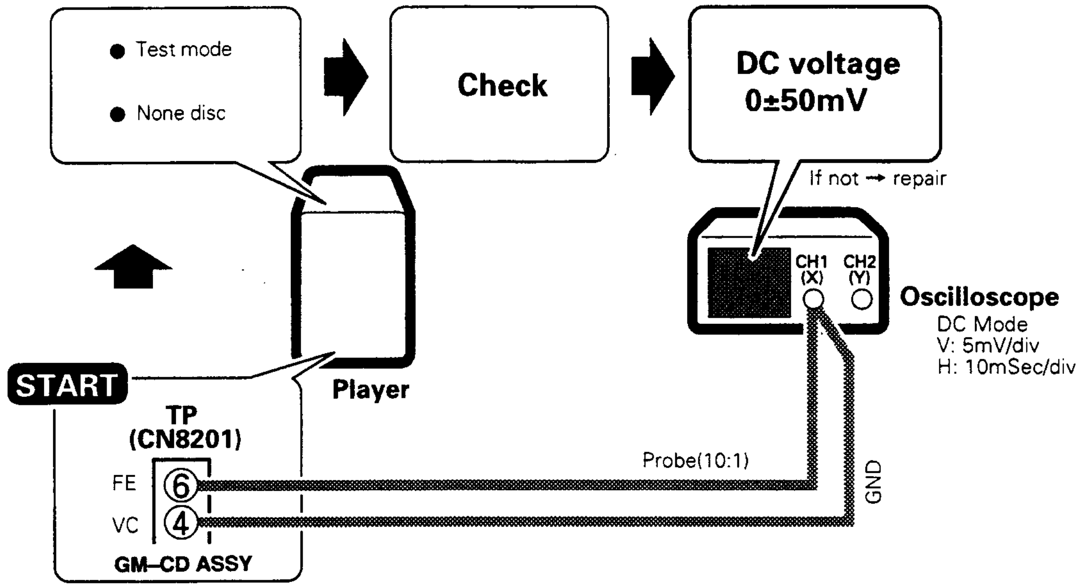
2.2Adjustment Locations（テストポイントと調整用VRの位置）


ADJUSTMENT SCREW
(Tangential tilt direction)
ADJUSTMENT SCREW
(Radial tilt direction)
PICKUP ASSY
MECHANISM ASSY
(FRONT)
CD TEST
VR8151
(TRACKING GAIN)
VR8152
(FOCUS GAIN)
GM-CD ASSY
(REAR)
CN8201
TP
① 1.RF
② 2.TE
③ 3.TI
④ 4.VC
⑤ 5.FI
⑥ 6.FE

2.3 Check and Adjustment (確認、調整)

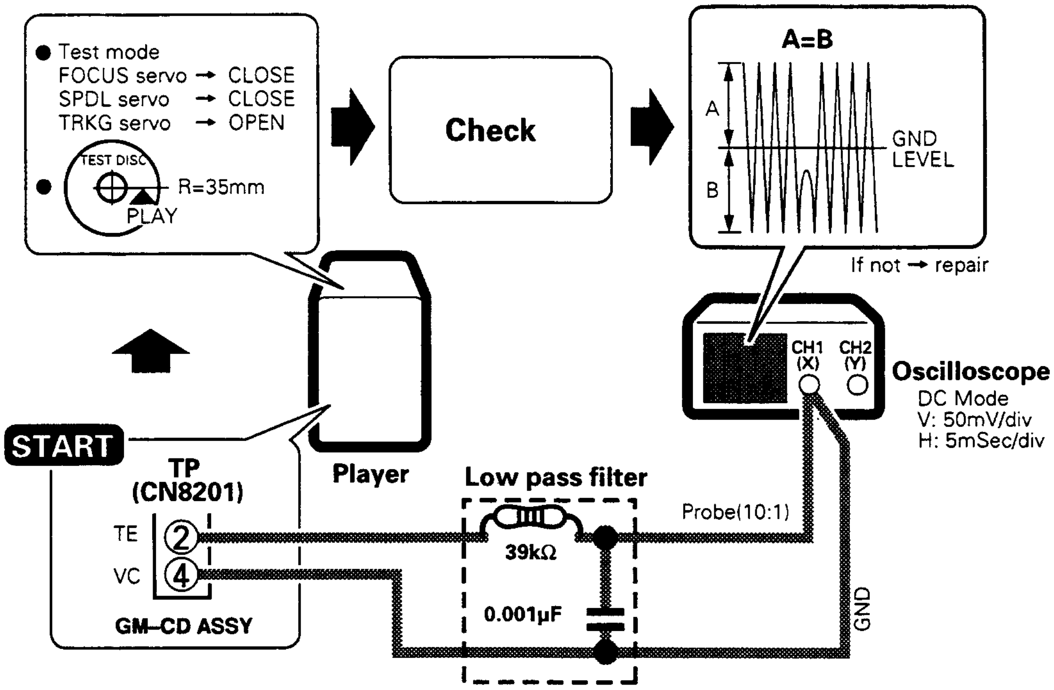
1. Focus Offset Check

(フォーカスオフセット確認)


● Test mode
● None disc
Check
DC voltage
0±50mV
If not → repair
CH1
(X)
CH2
(Y)
Oscilloscope
DC Mode
V: 5mV/div
H: 10mSec/div
START
Player
TP
(CN8201)
FE
6
VC
4
GM-CD ASSY
Probe(10:1)
GND

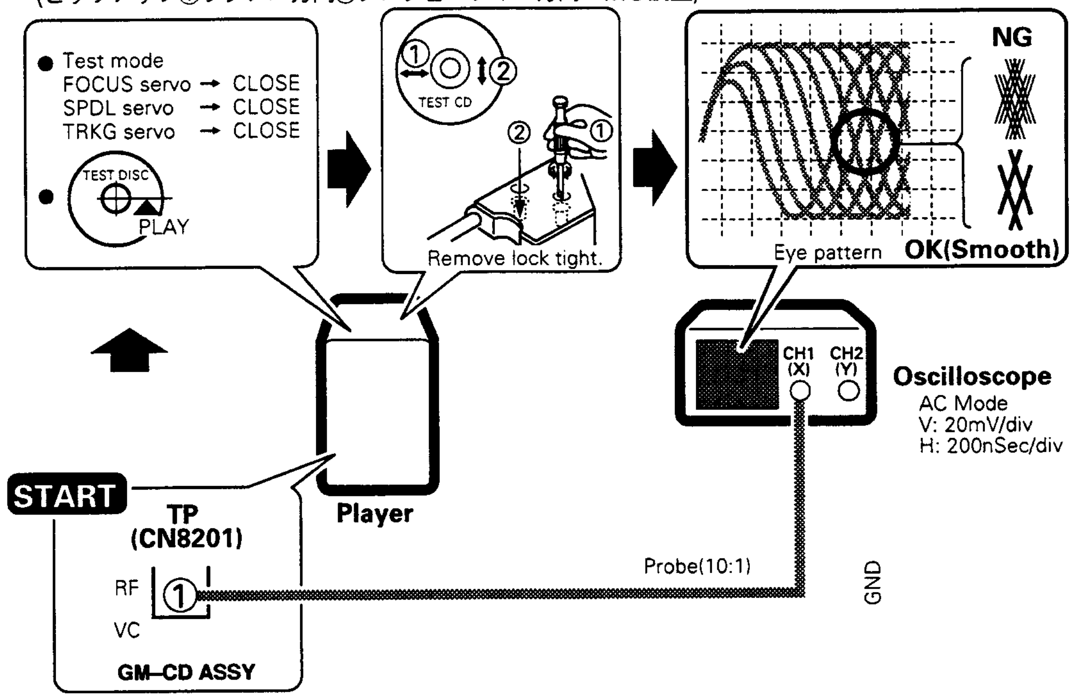
2. Tracking Error Balance Check

(トラッキングエラーバランス確認)


● Test mode
FOCUS servo → CLOSE
SPDL servo → CLOSE
TRKG servo → OPEN
● TEST DISC
R=35mm
PLAY
Check
A=B
A
B
GND
LEVEL
If not → repair
CH1
(X)
CH2
(Y)
Oscilloscope
DC Mode
V: 50mV/div
H: 5mSec/div
START
Player
Low pass filter
TP
(CN8201)
TE
2
VC
4
GM-CD ASSY
39kΩ
0.001μF
Probe(10:1)
GND

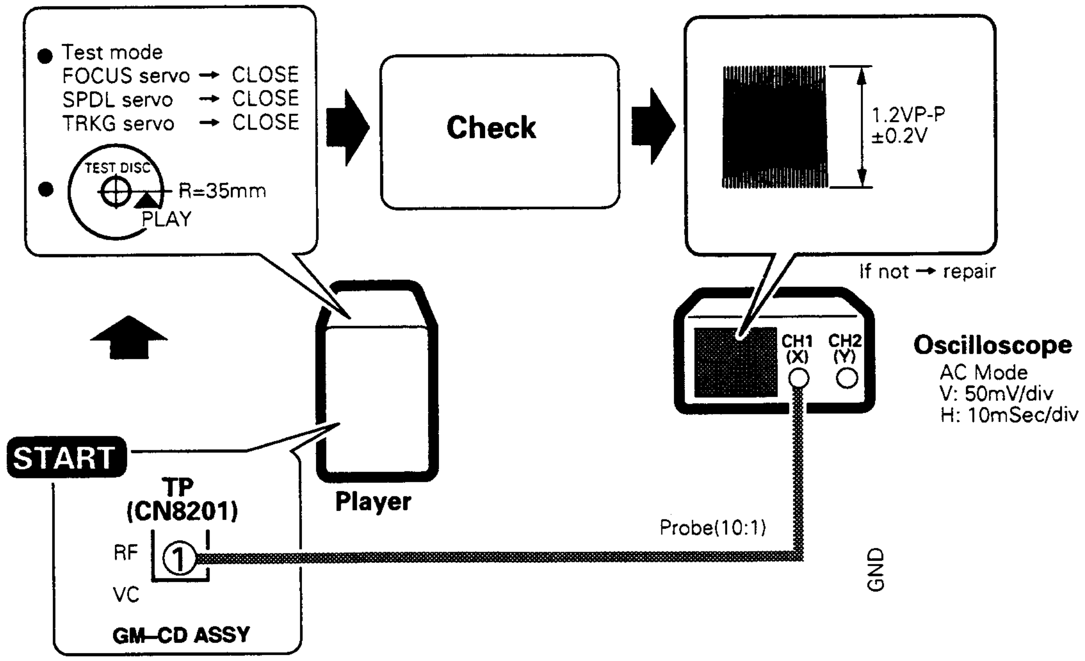
3. PICKUP ①RADIAL / ②TANGENTIAL DIRECTION TILT ADJUSTMENT

(ピックアップ①ラジアル方向②タンジェンシャル方向の傾き調整)


● Test mode
FOCUS servo → CLOSE
SPDL servo → CLOSE
TRKG servo → CLOSE
● TEST DISC
PLAY
①
②
TEST CD
②
①
Remove lock tight.
NG
Eye pattern
OK(Smooth)
START
TP
(CN8201)
RF
①
VC
GM–CD ASSY
Player
Probe(10:1)
CH1 (X)
CH2 (Y)
GND
Oscilloscope
AC Mode
V: 20mV/div
H: 200nSec/div

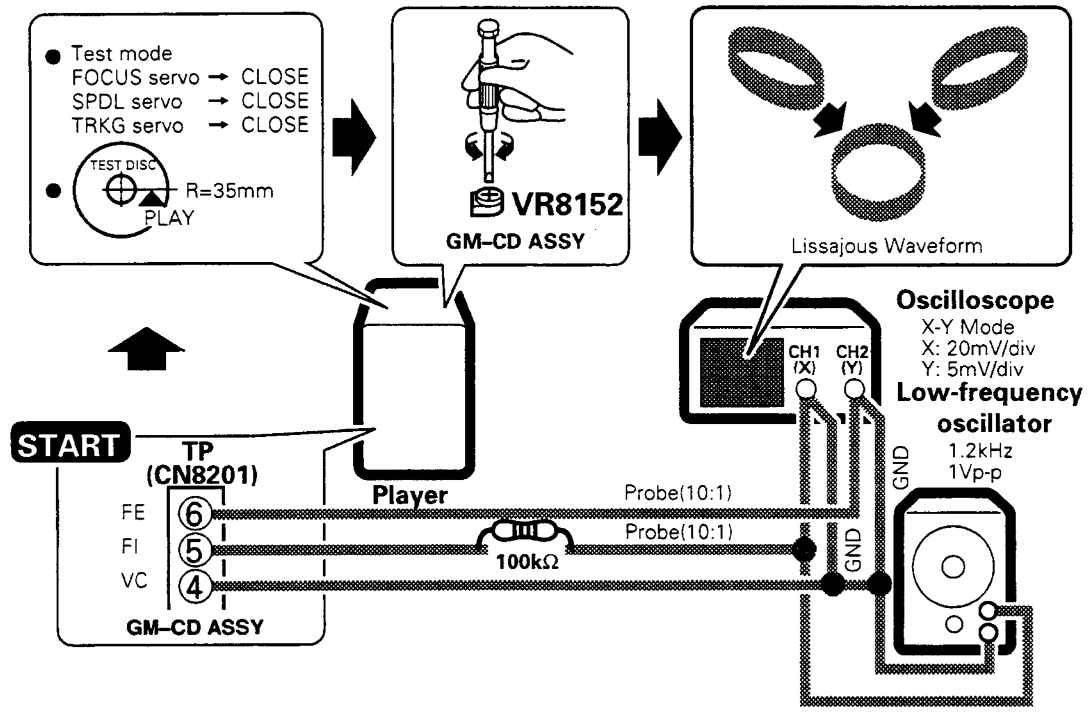
4. RF LEVEL CHECK

(RFレベル確認)


● Test mode
FOCUS servo → CLOSE
SPDL servo → CLOSE
TRKG servo → CLOSE
● TEST DISC
R=35mm
PLAY
Check
1.2VP-P
±0.2V
If not → repair
START
TP
(CN8201)
RF
①
VC
GM–CD ASSY
Player
Probe(10:1)
CH1 (X)
CH2 (Y)
GND
Oscilloscope
AC Mode
V: 50mV/div
H: 10mSec/div

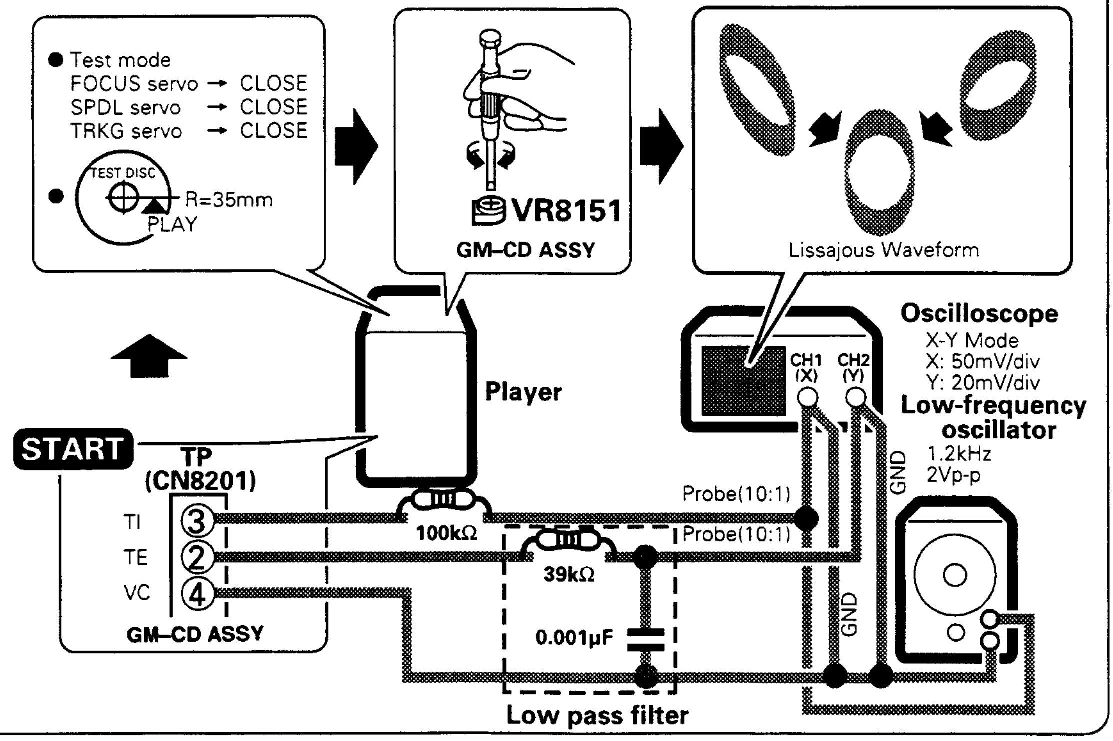
5. Focus Servo Loop Gain Adjustment

(フォーカスサーボループゲイン調整)


● Test mode
FOCUS servo → CLOSE
SPDL servo → CLOSE
TRKG servo → CLOSE
TEST DISC
● R=35mm
PLAY
VR8152
GM-CD ASSY
Lissajous Waveform
Oscilloscope
X-Y Mode
X: 20mV/div
Y: 5mV/div
CH1 (X)
CH2 (Y)
Low-frequency oscillator
1.2kHz
1Vp-p
GND
START
TP (CN8201)
FE ⑥
FI ⑤
VC ④
GM-CD ASSY
Player
Probe(10:1)
Probe(10:1)
100kΩ
GND

6. Tracking Servo Loop Gain Adjustment

(トラッキングサーボループゲイン調整)


● Test mode
FOCUS servo → CLOSE
SPDL servo → CLOSE
TRKG servo → CLOSE
TEST DISC
● R=35mm
PLAY
VR8151
GM-CD ASSY
Lissajous Waveform
Oscilloscope
X-Y Mode
X: 50mV/div
Y: 20mV/div
CH1 (X)
CH2 (Y)
Low-frequency oscillator
1.2kHz
2Vp-p
GND
Player
START
TP (CN8201)
TI ③
TE ②
VC ④
GM-CD ASSY
Probe(10:1)
Probe(10:1)
100kΩ
39kΩ
0.001μF
GND
Low pass filter

7. IC INFORMATION

- *The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.*

■ PDG164A (IC3001 : AF ASSY)

● System Control Micro Computer

● Pin Function

No.	Pin Name	I/O	Description	ACT
1	PE1EC1/INT1	I	NOT USED	–
2	PE2/INT2	I	DISP CLK EDGE	↓
3	PE3/INT3/NMI	I	NOT USED	–
4	PE4/RMC	I	REMOCON	L
5	PE5/CTL	I	NOT USED	–
6	PE6/PWM	O	CD RESET	L
7	PE7/TO/ADJ	O	SR MUTE	L
8	PB0/CINT	I	TUNED	L
9	PB1/CS0	I	STEREO	L
10	PB2/SCK0	I	DISP CLK	↑
11	PB3/SI0	I	DISP DATA	–
12	PB4/SO0	O	PLL CE	H
13	PB5/SCK1	O	EX CLK	↑
14	PB6/SI1	O	PM0006 CE	H
15	PB7/SO1	O	EX DATA	–
16	PC0/KR0	I	KEY IN 0	H
17	PC1/KR1	I	KEY IN 1	H
18	PC2/KR2	I	KEY IN 2	H
19	PC3/KR3	I	KEY IN 3	H
20	PC4/KR4	I	KEY IN 4	H
21	PC5/KR5	C	POWER	H
22	PC6/KR6	C	VOLUME UP	L
23	PC7/KR7	C	VOLUME DOWN	L
24	PH0	C	LED –	H
25	PH1	C	LED |◀◀	H
26	PH2	C	LED ◀	H
27	PH3	C	LED ▶	H
28	PH4	C	LED ▶▶|	H
29	PH5	C	LED +	H
30	PH6	C	LED STOP	–
31	PH7	I	Connected to GND	–
32	PA0/AN0	A/D	TEMP * 1	–
33	PA1/AN1	I	FST * 1	–
34	PA2/AN2	A/D	LEV * 1	–
35	PA3/AN3	I	Connected to GND	–
36	PA4/AN4	I	Connected to GND	–
37	PA5/AN5	I	Connected to GND	–
38	RST	–	RESET	–
39	EXTAL	–	Connected to Osillator (8MHZ)	–
40	XTAL	–	Connected to Osillator (8MHZ)	–
41	Vss	–	Connected to GND	–
42	TX	–	OPEN	–
43	TEX	–	OPEN	–
44	PA6/AN6	I	PULSE 1	EG
45	PA7/AN7	I	PULSE 2	EG
46	AVref	–	Connected to 5V	–
47	AVss	–	Connected to GND	–
48	PD0/S0	P	SOL 1	H
49	PD1/S1	P	SOL 2	H
50	PD2/S2	P	MOTOR	H
51	PD3/S3	P	DOLBY NR	L
52	PD4/S4	P	REC MUTE	H
53	PD5/S5	P	PB/$\overline{\text{REC}}$	–
54	PD6/S6	P	PB 1/$\overline{2}$	–

** 1 : Refer to page 61.*

No.	Pin Name	I/O	Description	ACT
55	PD7/S7	P	BIAS	H
56	PF0/S8	P	BEAT CUT	H
57	PF1/S9	P	FAN *1	H
58	PF2/S10	P	IDLE MUTE	L
59	PF3/S11	P	AOMT	H
60	PF4/S12	P	TX MONO	H
61	PF5/S13	P	TX ON	H
62	PF6/S14	P	AF MUTE	H
63	PF7/S15	P	NOT USED	H
64	P10/S16	P	S16	H
65	P11/S17	P	S15	H
66	P12/S18	P	S14	H
67	P13/S19	P	S13	H
68	P14/S20	P	S12	H
69	P15/S21	P	S11	H
70	P16/S22	P	S10	H
71	P17/S23	P	S1	H
72	T15/S24	P	S2	H
73	T14/S25	P	S3	H
74	T13/S26	P	S4	H
75	T12/S27	P	S5	H
76	T11/S28	P	S6	H
77	T10/S29	P	S7	H
78	T9/S30	P	S8	H
79	T8/S31	P	S9	H
80	T7	P	NOT USED	–
81	T6	P	G1	H

No.	Pin Name	I/O	Description	ACT
82	T5	P	G2	H
83	T4	P	G3	H
84	T3	P	G4	H
85	T2	P	G5	H
86	T1	P	G6	H
87	T0	P	G7	H
88	Vfdp	–	CONNECTED TO –30V	–
89	Vdd	–	CONNECTED TO 5V	–
90	NC	–	OPEN	–
91	Vss	–	CONNECTED TO GND	–
92	PG0/RT00	O	SB CLK	↑
93	PG1/RT01	I/O	SB DATA	–
94	PG2/RT02	I/O	SB REQ/ENA	L
95	PG3/RT03	O	4052 B	H
96	PG4	O	4052 A	H
97	PG5	O	4052 INH	H
98	PG6	O	SP RELAY	H
99	PG7	O	CD POWER ON	H
100	PE0/EC0/INT0	I	AC	EG

I/O : INPUT/OUTPUT
I : INPUT
O : OUTPUT
C : CMOS OUTPUT
P : Pch OPEN DRAIN OUTPUT
A/D : A/D CONVERTER INPUT
EG : EDGE

**1 : Refer to page 61.*

■ IN REGARD TO FAN CONTROL

(1) FAN CONTROL pin functions/names

The following five signals are used for L/H switching of the fan speed and for forces switching the set from Power on status to STD-by status.

	Function	Operation
PWON *1	The power status of the set is displayed.	L is displayed for STD-by and H for Power on.
FAN *2	The fan rotation status is shown.	L is displayed for L speed and H for H speed. The initial display at the time of Power on is L.
TEMP	The power pack temperature is detected.	The fan L/H speed is switched and the set is dropped to standby status according to the detected temperature.
LEV	Power amplifier level detection.	The fan L/H speed is switched according to the detected level.
FST	Fan lock status detection.	L is displayed when the fan is stopped and H when it is rotating.

(2) Operation specifications

*1 Power on → STD-by switching

The set is switched to STD-by condition when one of the following conditions occurs.

- When FST is L continuously for at least 2 sec after 4 seconds have elapsed after PWON output.
- When the TEMP voltage is 1.3 V or less after 4 seconds have elapsed after PWON output.

*2-1 Fan L → H speed switching

The fan is switched from L to H speed when one of the following conditions occurs.

- When the TEMP voltage is 2.6 V or less.
- When the LEV voltage is 1.7 V or more.

*2-2 Fan H → L speed switching

The fan is switched from H to L speed when the following condition occurs.

- When the TEMP voltage is 3.3 V or more and the LEV voltage is 1.2 V or less.

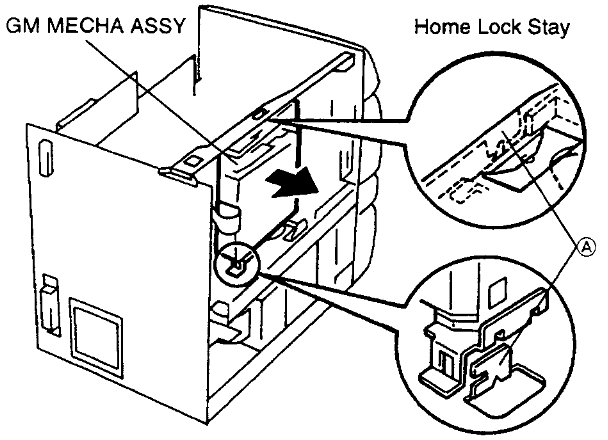
8. DISASSEMBLY

■ REMOVING THE GM MECHA ASSY

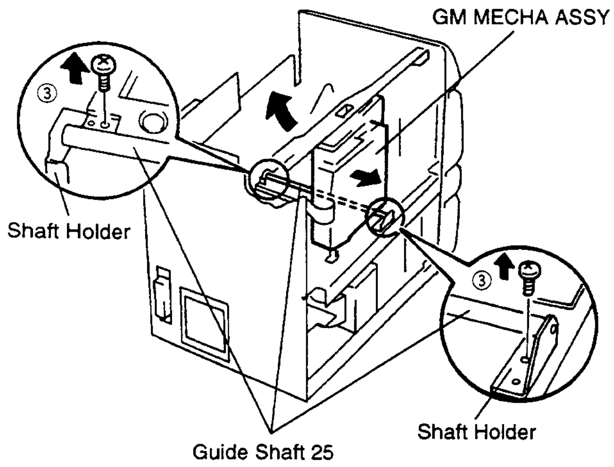
NOTE : Before removing the GM Mecha Assy, make sure you turn the power OFF and disconnect the AC power cord.

① Remove the bonnet. (Since the front of the home lock stay makes contact, hold the bonnet in that place and pull and lift at the same time.)

② Move the GM Mecha ASSY to the right (viewed from the rear), watching out for the 2 Lock locations (partⒶ).


GM MECHA ASSY
Home Lock Stay
Ⓐ

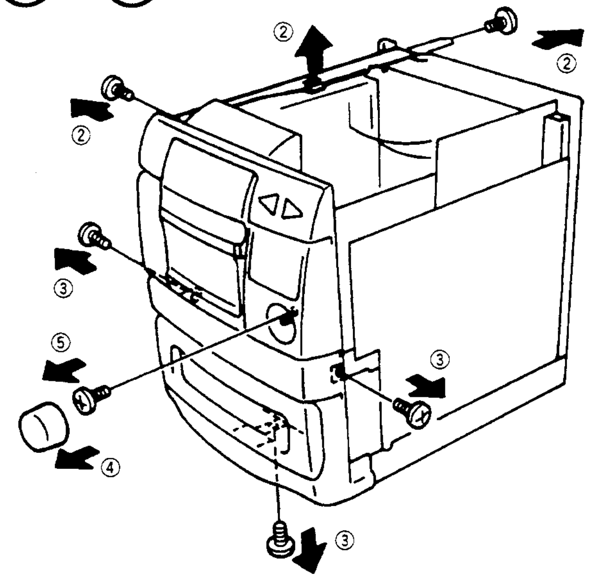
③ Remove the shaft holder that fixes guide shaft-25 in place (screw ③), and remove the GM Mecha ASSY together with guide shaft.


GM MECHA ASSY
③
Shaft Holder
③
Shaft Holder
Guide Shaft 25

■ REMOVING THE FRONT PANEL

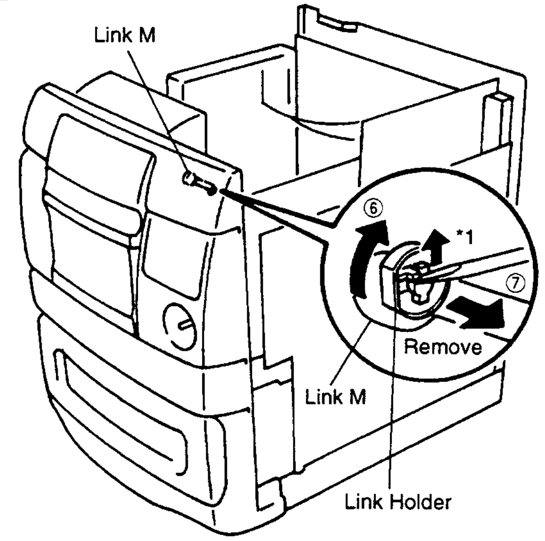
① Remove the bonnet.

②-⑤



⑥ Remove the link holder (*1) that fixes hood M and the link M in place.

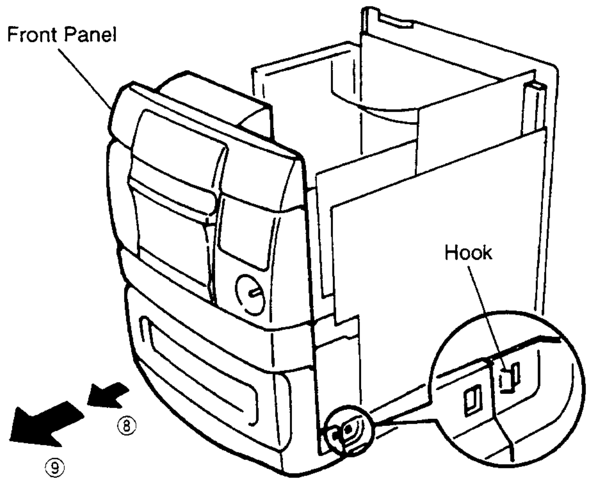
⑦ Remove the link M.


Link M
⑥
*1
⑦
Remove
Link M
Link Holder

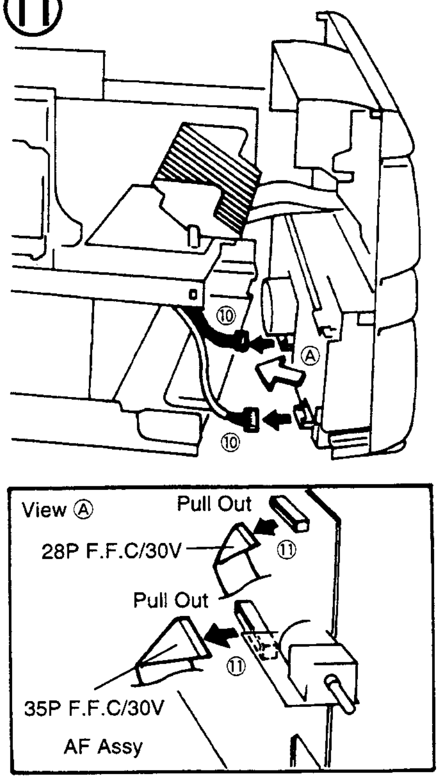
*Note *1: When removing the link holder, be careful not to press hard on the link holder hook, for this may cause the hook to break.*

⑧ Shift the front panel slightly toward you, being cautious of the left and right hook on the chassis and sub chassis.

⑨ Pull the front panel further toward you, and remove it from the chassis.


Front Panel
Hook
⑧
⑨

⑩, ⑪

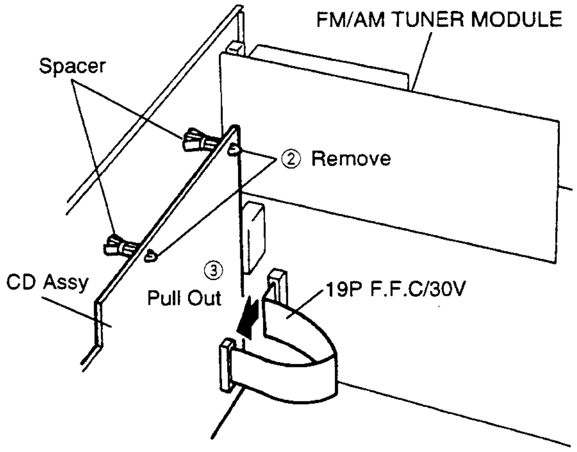

⑩
Ⓐ
⑩
View Ⓐ
Pull Out
28P F.F.C/30V
⑪
Pull Out
⑪
35P F.F.C/30V
AF Assy

■ REMOVING THE AMP ASSY

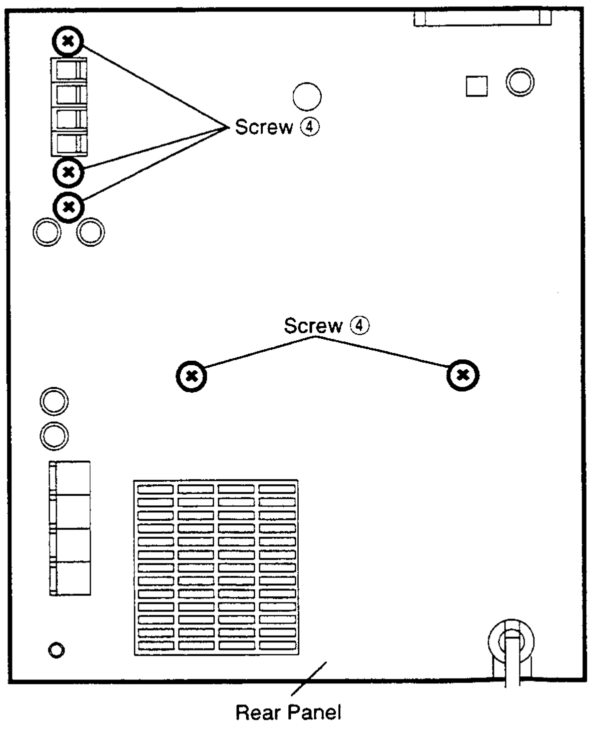
① Remove the bonnet and home lock stay. (Refer to "■ Removing the Front Panel")

②, ③

Remove the spacer from the CD ASSY.

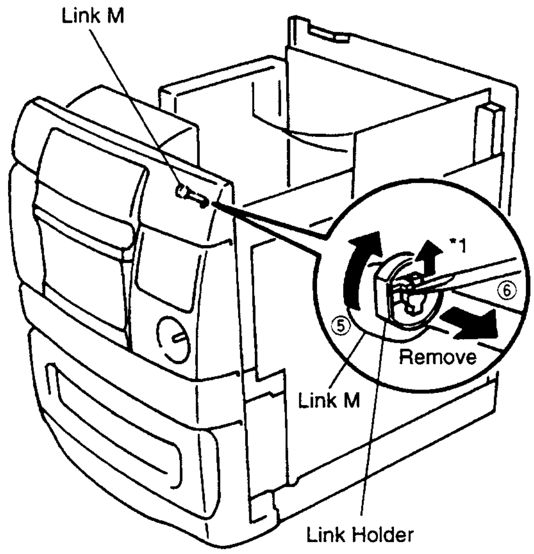

FM/AM TUNER MODULE
Spacer
② Remove
CD Assy
③
Pull Out
19P F.F.C/30V

④ Remove the rear panel (screw ④ x 5).


Screw ④
Screw ④
Rear Panel

⑤ Remove the link holder (*1) that fixes hood M and the link M in place.

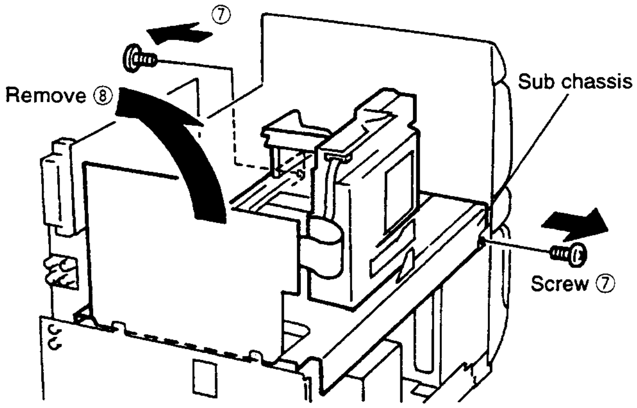
⑥ Remove the link M.


Link M
*1
⑥
⑤
Remove
Link M
Link Holder

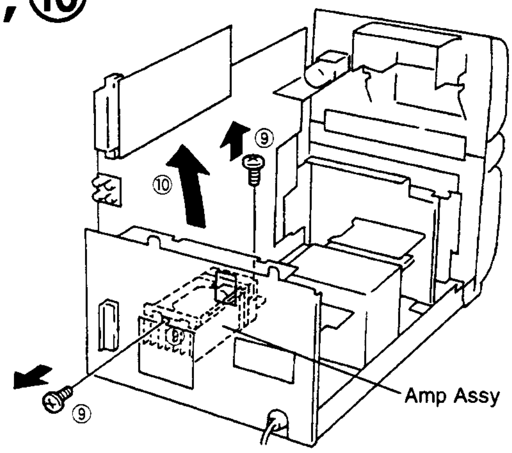
*Note *1: When removing the link holder, be careful not to press hard on the link holder hook, for this may cause the hook to break.*

⑦, ⑧

Remove screw ⑦ and remove the sub chassis together with the GM Mecha ASSY.


⑦
Remove ⑧
Sub chassis
Screw ⑦

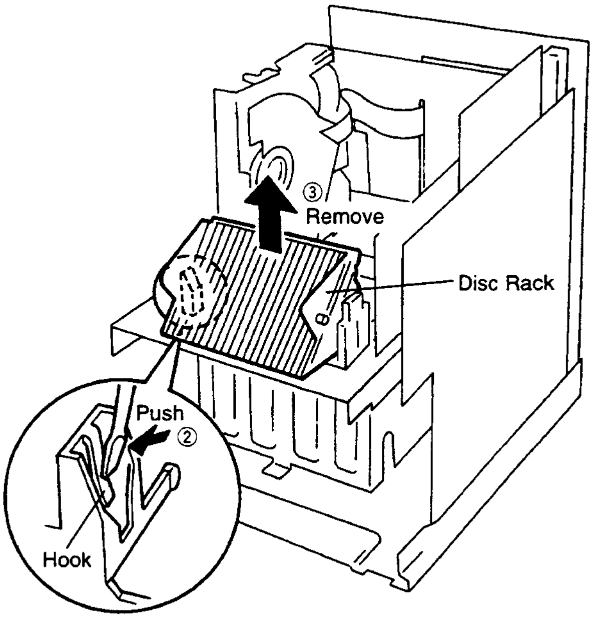
⑨, ⑩


⑨
⑩
⑨
Amp Assy

■ REMOVING THE DISC RACK

① Remove the front panel.

②, ③

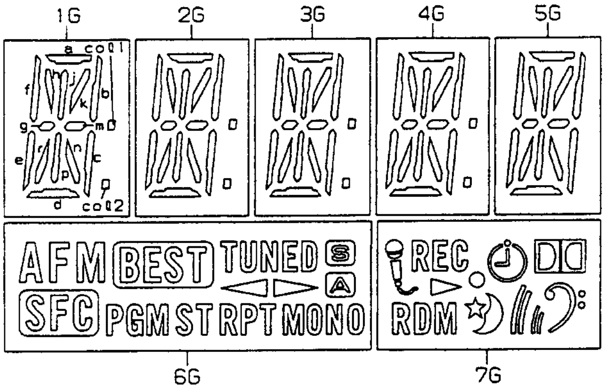

③
Remove
Disc Rack
Push
②
Hook

9. FL INFORMATION

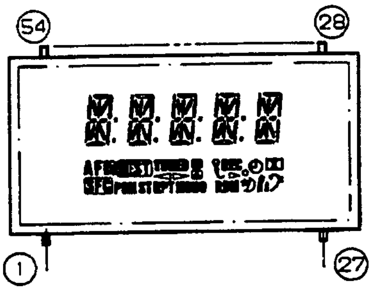
■ AAV7023 (V401: DISPLAY ASSY)

● FL Tube

● Grid assignment


1G
2G
3G
4G
5G
a
col1
f
h
j
k
b
g
m
e
r
p
n
c
d
col2
AFM BEST TUNED S
A
SFC PGM ST RPT MONO
REC
RDM
6G
7G

● Pin Assignment



● Anode Connection

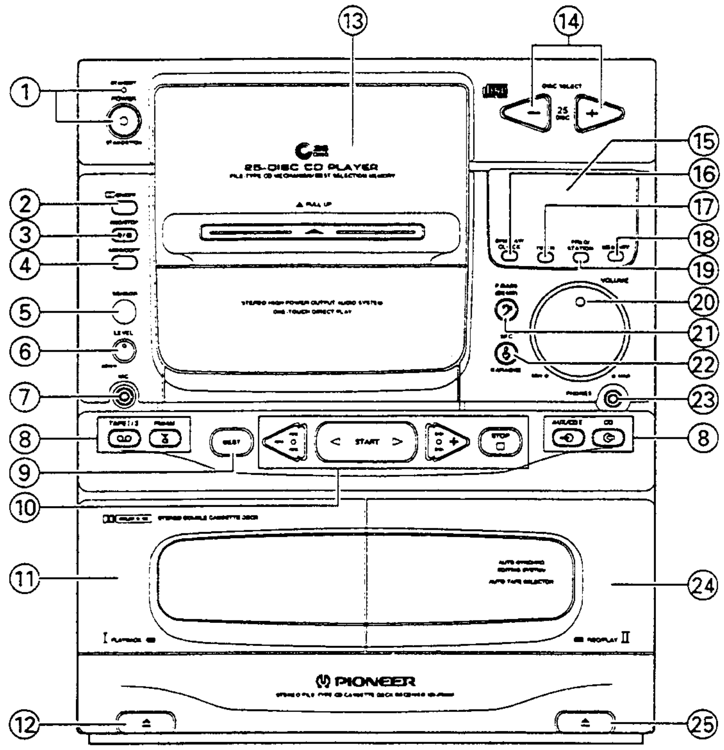
	1G~4G	5G	6G	7G
P1	col2	-	A	🎤
P2	d	d	F	REC
P3	n	n	M	◷
P4	p	p	BEST	DD
P5	r	r	TUNED	▷
P6	e	e	S	○
P7	c	c	A	RDM
P8	g	g	◁	☆☽
P9	m	m	▷	//
P10	f	f	SFC	𝄢
P11	b	b	PGM	-
P12	k	k	ST	-
P13	j	j	RPT	-
P14	h	h	MONO	-
P15	a	a	-	-
P16	col1	-	-	-

● Pin Connection

PIN NO.	54	53	52	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28
CONNECTION	F1	F1	NP	7G	6G	5G	4G	3G	2G	NX	NX	NX	NX	NX	NX	NX	NX	NX	1G	P16	P15	P14	P13	P12	NP	F2	F2

PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
CONNECTION	F1	F1	NP	IC	P1	P2	P3	P4	P5	NX	NX	NX	NX	NX	NX	NX	NX	NX	P6	P7	P8	P9	P10	P11	NP	F2	F2

10. PANEL FACILITIES



① **POWER STANDBY/ON switch and STANDBY indicator**
This is the switch for electric power.

ON	: When set to the ON position, power is supplied and the unit becomes operational.
STANDBY	: When set to the STANDBY position, the main power flow is cut and the unit is no longer fully operational. A minute flow of power feeds the unit to maintain operation readiness. (The STANDBY indicator lights.)

② **Dolby* NR ON/OFF button**
Each time this button is pressed, the Dolby NR system turns on and off.

③ **REC/STOP button (●/■)**

④ **ASES/COPY button**

⑤ **Remote sensor (SENSOR)**

⑥ **Microphone level (LEVEL)**

⑦ **Microphone jack (MIC)**

⑧ **Function buttons**

⑨ **BEST button**

⑩ **Common operation button section (Refer to page 18)**

⑪ **TAPE I cassette door**

⑫ **TAPE I Eject button (⏏)**

⑬ **Hood**

⑭ **DISC SELECT button (–, +)**

⑮ **Display**

⑯ **DISPLAY/CLOCK button**

⑰ **TIMER button**

⑱ **MEMORY button**

⑲ **FREQ/STATION button**

⑳ **VOLUME control**

㉑ **P.BASS (DEMO) button**

㉒ **SFC/KARAOKE button**
Each time this button is pressed, the mode changes in the following sequence:

→ HALL → LIVE → DISCO →
off ← KARAOKE ← MOVIE ←

NOTE:
If KARAOKE is selected, the vocal part in songs is muted and only the instrumental accompaniment (backup) is played.

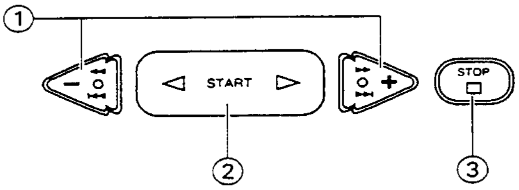
㉓ **Headphones jack (PHONES)**

㉔ **TAPE II cassette door**

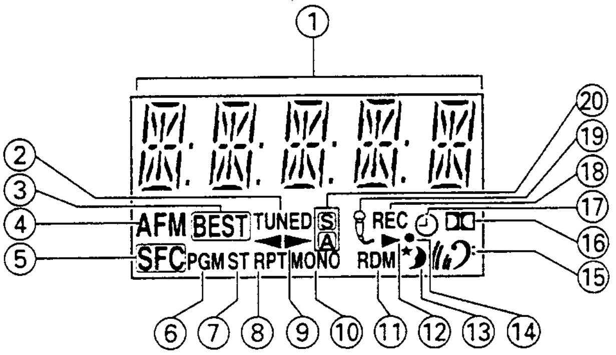
㉕ **TAPE II Eject button (⏏)**

*
- *Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.*
- *"DOLBY" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.*

Common operation button section/Sección de botón de operación común



Display/
Presentación/



① ◁, ▷ buttons

② START button (◄ ►)

③ STOP button (■)

- Roles of the common operation buttons (The roles of the buttons vary depending on the input functions as shown below.)

During CD input
START : Play/pause button
STOP : Stop button
▷ : Fast forward/track search button
◁ : Fast reverse/track search button

During cassette deck input
START : Play button/Tape transport direction
STOP : Stop button
▷ : Fast forward button
◁ : Rewind button

During tuner operation
▷ : Frequency Up button
◁ : Frequency Down button

① Indicates frequency and major operation status.
② Lights during radio broadcast reception.
③ Flashes during Best Selection setting, and lights during Best (Selection memory) play.
④ Indicates the band AM or FM.
⑤ Lights during SFC mode operation.
⑥ Lights when you press the PGM button.
⑦ Lights when an FM stereo broadcast is received.
⑧ RPT : Lights during repeat play.
⑨ Lights to show TAPE II tape direction.
⑩ Lights when you press the MONO button.
⑪ Lights when you press the RANDOM button.
⑫ Lights during CD play.
(Flashes in pause mode.)
⑬ Lights during sleep timer operation.
⑭ Lights when setting the Beat Cut function.
⑮ Lights when you press the P.BASS button.
⑯ Lights when Dolby NR is ON.
⑰ Lights when setting the timer.
⑱ Lights during recording and recording timer operation.
⑲ Lights during KARAOKE mode operation.
⑳ S : Lights during SINGLE mode operation.
A : Lights during ALL mode operation.

11. SPECIFICATIONS

■ STEREO FILE-TYPE CD CASSETTE DECK RECEIVER: XR-P260F

Amplifier Section

<U.S. and Canadian models>

Continuous average power output is 50 watts* per channel, min., at 8 ohms from 60 Hz to 15,000 Hz with no more than 1.0 % total harmonic distortion.**

<Australian model>

Continuous Power Output (RMS)	70 W + 70 W (1 kHz, T.H.D. 10 %, 8 Ω)
Peak Music Power Output	1000 W

FM Tuner Section

Reception frequencies	87.5 MHz to 108 MHz
Antenna input	75 Ω unbalanced

AM Tuner Section

Reception frequencies	531 kHz to 1,602 kHz (9 kHz step) 530 kHz to 1,700 kHz (10 kHz step)
Antenna	Loop antenna (included)

Double Cassette Deck Section

System type	4-track, 2-channel stereo
Heads	Recording/playback head x 1 Playback head x 1 Erasing head x 1
Motor	DC servo motor x 1
Frequency response	
Type I (Normal) tape	*35 Hz to 14,000 Hz ±6 dB (recorded at -20 dB)
SN ratio	*56 dB (peak recording level, audible compensation)
Dolby B type NR on	10 dB compensation at 5 kHz

* Values measured in accordance with EIAJ standards.

■ FILE TYPE CD PLAYER

Type	Compact disc audio system
Usable discs	Compact audio discs
Channels	2 channels (stereo)
Program steps	32 steps maximum

■ ELECTRICAL REQUIREMENTS, ETC.

Power Requirements	
U.S., Canadian models	AC 120 V, 60 Hz
Power Consumption	
U.S. model	160 W
External dimensions	260 (W) x 310 (H) x 369 (D) mm 10-1/4 (W) x 12-3/16 (H) x 14-1/2 (D) in.
Weight	11 kg (24 lb 5 oz)

■ ACCESSORIES

Operating Instructions	1
FM antenna	1
AM loop antenna	1
Remote control unit	1
AA/R6 dry cell batteries	2
CD case stand	1

NOTE:

Specifications and design are subject to possible modifications without notice, due to improvements.

* Measured pursuant to the Federal Trade Commissions's. Trade Regulation rule on Power Output Claims for Amplifier.

** Measured by audio spectrum analyzer.